

Office of River Protection

Tri-Party Agreement
Manager Milestone Review Meeting
January 27, 2009

Office of River Protection

U.S. Department of Energy
U.S. Environmental Protection Agency
Washington State Department of Ecology

December 2008

RECEIVED
FEB 22 2010
EDMC

Agenda

Office of River Protection
 Tri-Party Agreement
 Manager Milestone Review Meeting
 2440 Stevens Center, Conference Room 1600
 January 27, 2009
 9:00 a.m. – 11:30 a.m.

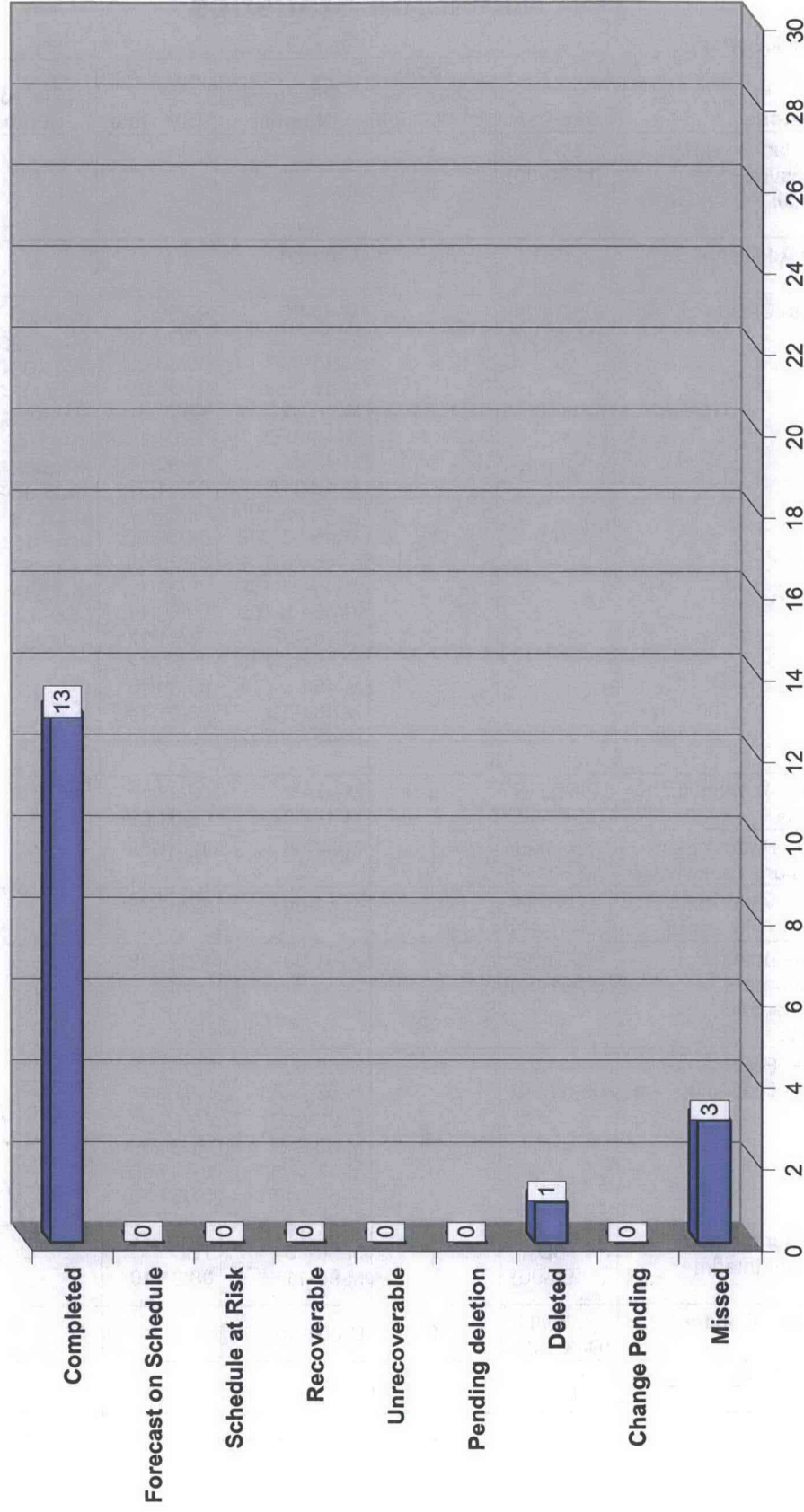
Page	Topic	Leads	Time
3	TPA Milestone Statistics	Woody Russell Suzanne Dahl /Jeff Lyon	9:00
48	M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober /Joe Caggiano	9:05
50	M-45-00, Complete Closure of All Single-Shell Tank Farms	Chris Kemp /Jeff Lyon	9:15
59	Interim Stabilization Consent Decree	John Long /Nancy Uziemblo	9:30
60	In Tank Characterization and Summary	John Long /Michael Barnes	9:40
61	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Ben Harp /Les Fort	9:45
63	M-90-00, Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/Disposal of ILAW and M-20, Part B Permits	Ben Harp /Bud Derrick	9:50
64	M-62-08, M-62-11 Bulk Vitrification/ Supplemental Technologies	Ben Harp /Ed Fredenburg	9:55
	BREAK		
21	FY 2007 ORP TPA Cost & Schedule Performance (CHG)	Janet Diediker Ed Fredenburg /Jeff Lyon	10:00
73	BNI Cost & Schedule Performance and M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	Bruce Nicoll /Pete Furlong /Wahed Abdul /Gary Olsen/Howard Budweg / Ed Fredenburg	10:05

TPA Milestone Statistics

(Including target milestones)

Milestone	Due Date	Total Active as of 02/21/08	Milestone Number	Due Date	Milestone Number	Due Date
M-20-00 , Submit Part B Permit Application on Closure/Post Closure Plans for all RCRA TSD Units	12/31/08 (M-20-00)	0				
M-42-00 , Provide Additional DST Capacity	TBD	1	M-42-00	TBD		
M-45-00 , Complete Closure of all SST Farms	09/30/24 (M-45-00)	35	M-45-00 M-45-00B M-45-00C M-45-00D M-45-02 M-45-02O M-45-05 M-45-05A M-45-05-T05 M-45-05-T06 M-45-05-T07 M-45-05-T08 M-45-05-T09 M-45-02P M-45-05-T10 M-45-05-T11 M-45-02Q M-45-05-T12	09/30/24 09/30/06 09/30/06 01/31/08 TBD 03/01/10 09/30/18 03/31/07 09/30/07 09/30/08 09/30/09 09/30/10 09/30/11 03/01/12 09/30/12 09/30/13 03/01/14 09/30/14	M-45-05-T13 M-45-02R M-45-05-T14 M-45-05-T15 M45-02S M-45-06 M-45-06-T03 M-45-06-T04 M-45-13 M-45-15 M-45-56 M-45-59 M-45-61 M-45-62	09/30/15 03/01/16 09/30/16 09/30/17 03/01/18 09/30/24 03/31/12 03/31/14 06/30/11 06/30/11 TBD TBD 12/31/10 07/31/12
M-47-00 , Complete All Work for Phase 1 Operations	02/28/18 (M-47-00)	3	M-47-00 M-47-03A	02/28/18 03/31/09	M-47-06	06/30/10
M-50-00 , Complete Pretreatment Processing of Hanford Tank Waste	12/31/28 (M-50-00)	1	M-50-00	12/31/28		
M-51-00 , Complete Vitrification of Hanford High Level Tank Waste	12/31/28 (M-51-00)	1	M-51-00	12/31/28		
M-61-00* (alternate path), Complete Pretreatment & Immobilization of Hanford Low Activity Tank Waste	12/31/28 (M-61-00)	1	M-61-00	12/31/28		
M-62-00 , Complete Pretreatment Processing and Vitrification of Tank Wastes	12/31/28 (M-62-00)	14	M-62-00 M-62-00A M-62-07B M-62-01R M-62-01S M-62-01T	12/31/28 02/28/18 12/31/07 01/31/09 07/31/09 01/31/10	M-62-08 M-62-09 M-62-01U M-62-01V M-62-10 M-62-01W M-62-11	06/30/06 02/28/09 07/31/10 01/31/11 01/31/11 07/31/11 06/30/07
M-90-00 , Interim Storage and Disposal of LAW and Interim Storage of HLW	TBD (M-90-00)	2	M-90-00 M-90-11	TBD 08/31/10		
Interim Stabilization Consent Decree	09/30/04 (D-001-00)	1	D-001-00			
Total Active Milestones:		59				

FY 2006 MILESTONE PERFORMANCE



Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R26	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/05	10/31/05								
M-048-07A-A	Complete construction of the AZ-301 condensate return system and remove the AZ-151 catch tank system from service by October 31, 2005. This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-A.	10/31/05	10/31/05								
M-046-21	Complete Implementation Of Double Shell Tank Space Optimization Study Recommendations (Tank Space Options Report Document No. RPP-7702, April 12, 2001).	12/31/05	12/15/05								
M-062-01L	Submit Semi-Annual Project Compliance Report.	01/31/06	01/31/06								
M-045-02M	Submit biennial update to SST retrieval sequence document (agreement Appendix I, Section 2.1.2), double-shell tank space evaluation document and Ecology concurrence of additional tank acquisition.	3/1/06	3/13/06								

Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-048-07A-B	Completion of construction for the 241-AP-106A central pump pit upgrade (remove existing equipment, evaluate pit integrity, and replace pit coating, if necessary). This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-B.	3/31/06	3/30/06								
M-048-14	Submit Written Integrity Report For The Double-Shell Tank System.	3/31/06	3/31/06								
M-047-05A	Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial low-activity waste feed tank (other than AZ-101 or AZ-102).	4/30/06	02/2/05								
M-45-55-T04	Submit to Ecology for review and comment a draft Field Investigation Report combining the results of field investigations and analysis for WMAs A-AX, C and U. As part of the Phase 2 Vadose Zone project renegotiations being developed, this target milestone scope has been included in M-45-55 Phase 1 rollup documentation due in 1/08.	4/30/06								X	

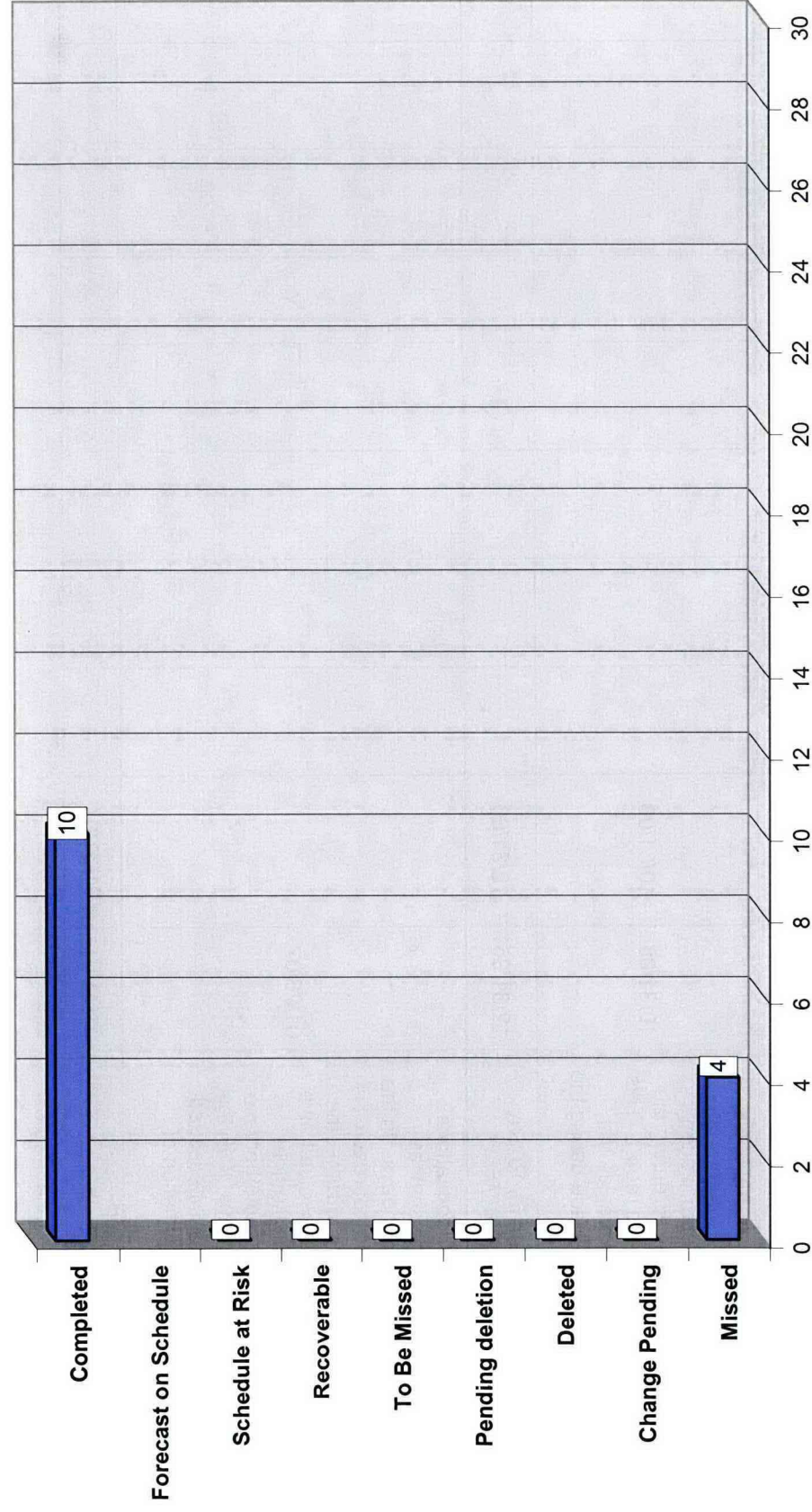
Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-048-07A	Complete construction of the AZ-301 condensate return system and pit upgrades. This includes: 1) Complete construction of the AZ-301 condensate return system and remove the AZ-151 catch tank system from service [see M 45-07A-A]; 2) Complete construction of AP-106A Central Pump upgrade [M-48-07A-B]; and 3) complete construction of SY-B Valve Pit upgrade [see M 48-07A-C].	06/30/06	06/28/06								
M-048-07A-C	Completion of construction for the 241-SY-B valve pit upgrade (remove existing equipment, evaluate pit integrity, and replace pit coating, if necessary). This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-C.	06/30/06	06/08/06								
M-048-07B	The Disposition of all Double-Shell Tank Transfer System Components that will not remain in use beyond June 30, 2005.	06/30/06	6/27/06								
M-062-08	Submittal Of Hanford Tank Waste Supplemental Treatment Technologies Report, Draft Hanford Tank Waste Treatment Baseline, And Draft Negotiations Agreement In Principle (AIP).	06/3/06						X			

Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-56B	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/01/06	09/05/06								
M-062-01M	Submit Semi-Annual Project Compliance Report.	07/31/06	07/31/06								
M-045-00B	Complete specified "near term" SST waste retrieval and interim closure activities, to result in the retrieval of all tank wastes in WMA-C SST's pursuant to the agreement criteria in milestone M-45-00.	09/30/06						X			
M-045-00C	Initiate negotiation of SST waste retrieval and closure activities and associated schedules (for the period February 07 through August 08).	09/30/06						X			

FY 2007 MILESTONE PERFORMANCE



Fiscal Year 2007 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R30	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/06	10/31/06								
M-062-03	Submit DOE Petition for RCRA Delisting of Vitrified HLW.	12/31/06	12/31/06								
M-045-00C-A	Ecology and DOE negotiations under this milestone shall be completed within 120 days. In the event the parties do not reach agreement within timeframe, the negotiations will be resolved as a resolution of dispute via final determination. Unless otherwise agreed by Ecology and DOE, this final determination will be issued within 150 days of initiation of negotiations.	01/28/07						X			
M-062-01N	Submit Semi-Annual Project Compliance Report.	01/31/07	01/31/07								

Fiscal Year 2007 Tri-Party Agreement Milestone Status

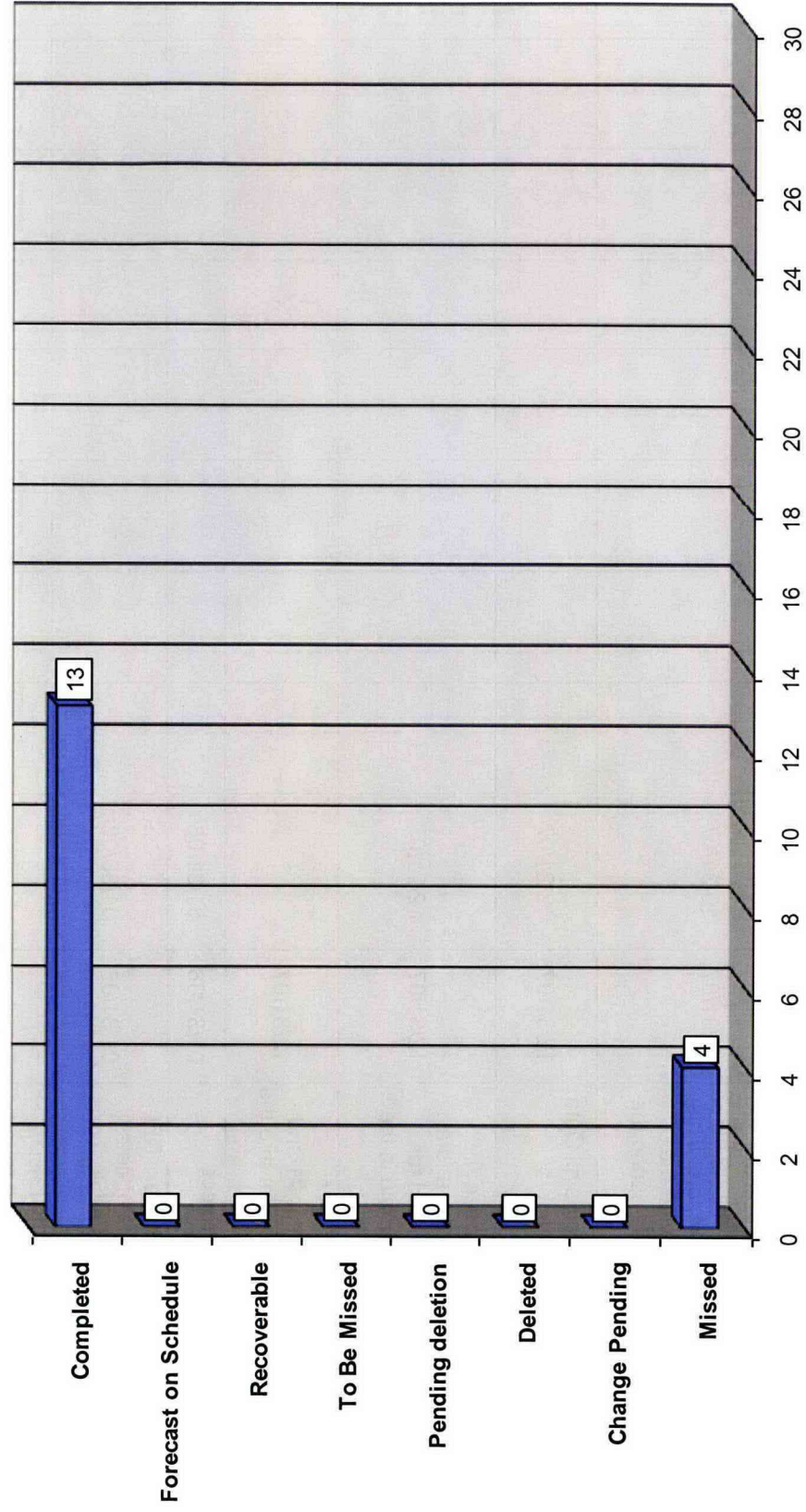
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R31	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	01/31/07	01/31/07								
M-045-05A	Complete Waste Retrieval from S-102.	3/31/07						X			
D-001-00-R32	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/07	04/27/07								
M-062-11	Submit a Final Hanford Tank Waste Treatment Baseline. Following completion of negotiations required by M-62-08, DOE will modify its draft baseline as required and submit its revised, agreed-to baseline for treating all Hanford Tank Waste (HLW, LAW, and TRU) by 12/31/2028.	06/30/07						X			

Fiscal Year 2007 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-56C	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/07	07/31/07								
D-001-00-R33	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/07	07/30/07								
M-062-01O	Submit Semi-Annual Project Compliance Report.	07/31/07	07/31/07								
M-048-15	Submit a report to Ecology for the re-examination of six (6) DSTs by ultrasonic testing in all areas previously examined to provide comparative data from which to calculate corrosion rates in each of the six DSTs examined.	09/30/07	09/27/07								
M-045-05-T05	Initiate tank retrieval from five additional single-shell tanks.	09/30/07						X			
M-048-00	Complete Tank Integrity Assessment activities for Hanford's Double Shell Tank (DST) system.	09/30/07	09/27/07								

* Milestone has been completed by ORP; Ecology has not yet concurred.

FY 2008 MILESTONE PERFORMANCE



Fiscal Year 2008 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R34	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/07	10/31/07								
M-045-13-A	Submit to Ecology a Retrieval Data Report for S-112 pursuant to Agreement Appendix I.	12/31/07	12/21/07								
M-045-13-B	Remaining waste has been adequately characterized, and a risk assessment completed for S-112 residuals that remain in the tank.	12/31/07	12/21/07								
M-062-07B	Complete Assembly of LAW Vitrification Facility melter #1 and complete move of #1 melter into the HLW Vitrification Facility	12/31/07						X			
M-062-01P	Submit Semi-Annual Project Compliance Report.	01/31/08	01/31/08								
M-045-55	Submit to Ecology a Phase 1 RFI report integrating results of data gathering activities and evaluations for all SST WMAs.	01/31/08	01/30/08								
D-001-00-R35	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	01/31/08	01/31/08								

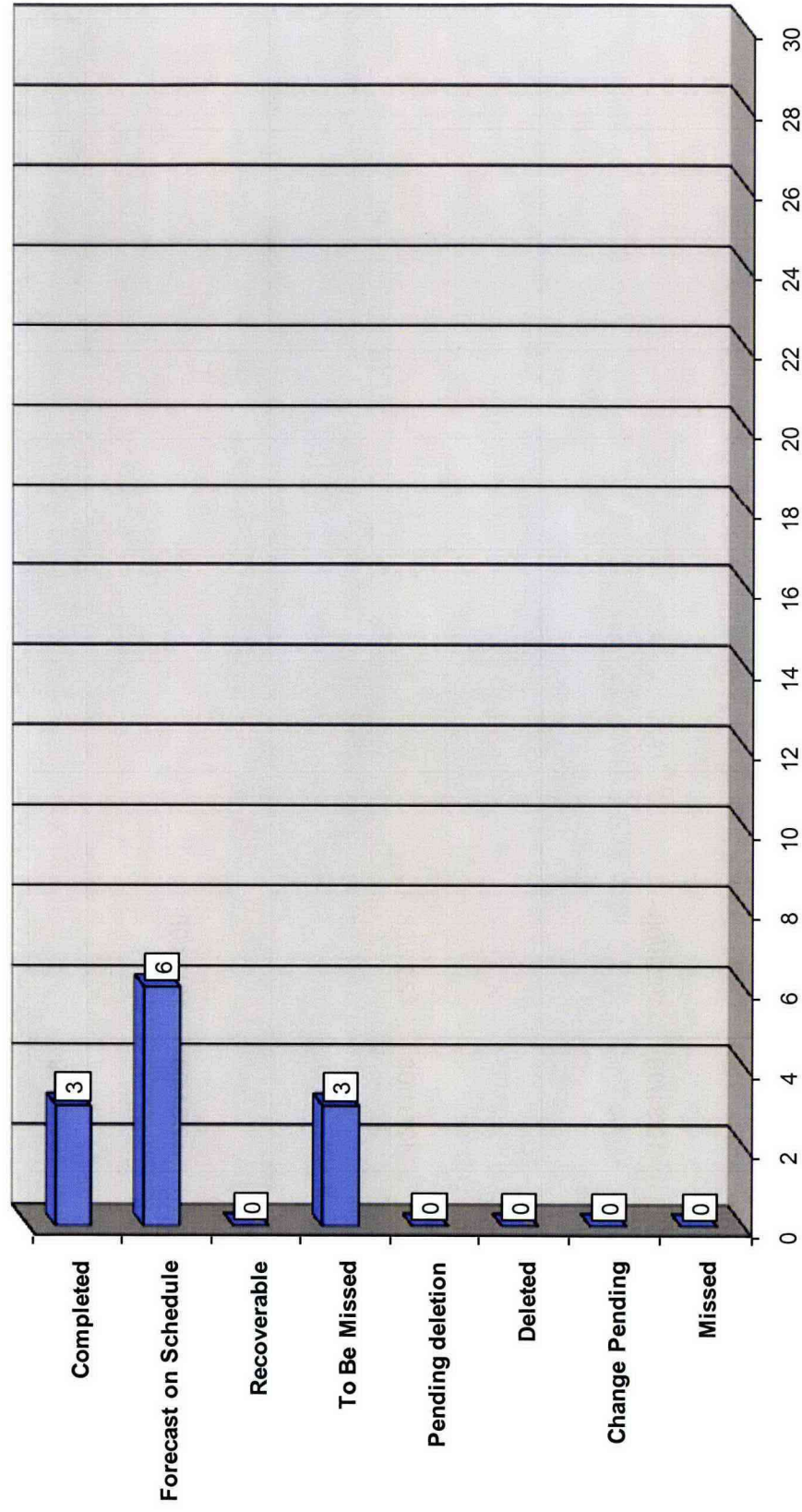
Fiscal Year 2008 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-00D	Initiate negotiations of SST waste retrieval and closure for 2008-2013.	01/31/08						X			
M-045-02N	Submit Biennial Update.	03/01/08	02/29/08								
M-045-02N-A	Three Parties shall meet to establish new milestones within 60 days, if required, for acquisition of additional tanks.	06/02/08	01/22/09								
D-001-00-R36	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/08	04/30/08								
M-045-00D-A	Negotiations shall be complete within 150 days.	06/29/08						X			
M-045-56D	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/08	07/22/08								
D-001-00-R37	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/08	07/31/08								

Fiscal Year 2008 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-062-01Q	Submit Semi-Annual Project Compliance Report.	07/31/08	07/30/08								
M-090-10	Ready to accept placement of ILAW in ILAW Disposal Facility.	08/31/08	02/13/07								
M-45-05-T06	Initiate tank retrieval from five additional SSTs.	09/30/08						X			

FY 2009 MILESTONE PERFORMANCE



Fiscal Year 2009 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R38	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/08	10/28/08								
M-045-58	Submit to Ecology for Review and Approval as an Agreement Primary Document Phase 2 Master Work Plan that describes the proposed approach for the completion of Corrective Action to meet final closure requirements in the Waste Management Areas as described in Appendix I, Section 2.3	12/31/08	12/23/08								
M-045-60	Submit to Ecology for review and approval as an agreement primary document, DOE's Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C.	12/31/08	12/23/08								
M-062-01R	Submit Semi-Annual Project Compliance Report	01/31/09		X							

Fiscal Year 2009 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R39	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	01/31/09		X							
M-062-09	Start Cold Commissioning – Waste Treatment Plant	02/28/09					X				
M-47-03A	Complete startup/turnover for waste retrieval mobilization systems for selected initial tank high-level waste feed tank	03/31/09					X				
D-001-00-R40	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/09		X							
M-045-56E	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/09		X							

Fiscal Year 2009 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R41	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/09		X							
M-062-01S	Submit Semi-Annual Project Compliance Report	07/31/09		X							
M-045-05-T07	Initiate tank retrieval from 7 additional SSTs	09/30/09					X				

EXECUTIVE SUMMARY ON TANK FARMS EARNED VALUE REPORTING

Project Baseline Performance Status

WRPS Project Performance - November (\$K)								
	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	17,882.5	17,254.2	14,025.0	-628.3	-3.5%	3,229.2	18.7%	
CTD	32,186.0	31,431.1	28,650.8	-754.9	-2.3%	2,780.3	8.8%	245,571.2

Summary Assessment: The Current Month (CM) Schedule Variance (SV) was -\$628.3K with a Schedule Performance Index (SPI) of 0.97; the Cost Variance (CV) was \$3,229.2K (18.7 percent) with a Cost Performance Index (CPI) of 1.23. The Cumulative to Date (CTD) SV was -\$754.9K with an SPI of 0.98; the CV was \$2,780.3K with a CPI of 1.1.

The SV is driven by work that has been impacted by ongoing efforts to identify work priorities and budget adjustments to align the FY09 IPMB to anticipated funds. BCR RPP-09-001 (IPMB Rev. 2) is the culmination of work collectively done to resolve ORP scope priorities, baseline estimate and schedule comments, and to implement WRPS Cost Recovery Initiatives. Upon approval of the BCR and implemented in December 2008, the WRPS performance measurement and reporting systems will reflect the accurate scope and schedule of planned activities.

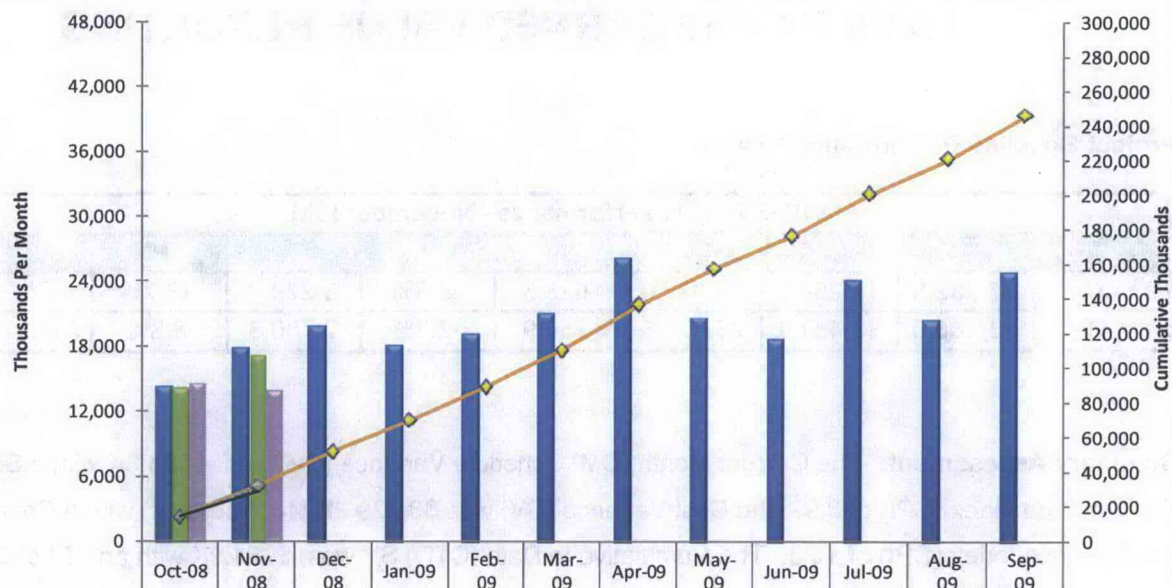
The CM CV of \$3,229.2K is driven by November removal of approximately \$3.1M of costs accrued in October for the value of spares assets transferred from CH2M HILL to WRPS. These costs were appropriately removed, eliminating the cost variance, pending reconciliation of the inventory and incorporation of the spares in the WRPS TOC baseline. Upon reconciliation of the inventory, ORP will de-obligate the value of the inventory from the CH2M HILL TFC contract and re-obligate funds that equal to the value of the spares inventory, to the TOC. A BCP will be processed to add BCWS to the baseline (equal to the value of the spares assets and obligated funds).

The CTD CV of \$2780.3K and associated is due to 1) Miscellaneous cost efficiencies and savings on work performed to date; 2) Costs below plan due to work started late or delayed until later in the year pending re-planning via BCR (progress taken per the plan); and 3) costs pending accrual or entry into the system. Significant revisions to the FY09 baseline will be implemented in December 2008 via BCR RPP-09-001.

The CM and CTD earned value performance is shown on the graph below

WRPS Cumulative-to-Date Performance (\$000)

October 2008 - September 2009



Mthly Plan (BCWS)	14,304	17,883	19,906	18,059	19,177	21,078	26,244	20,709	18,764	24,177	20,413	24,859
Mthly Perf (BCWP)	14,177	17,254										
Mthly Actuals (ACWP)	14,626	14,025										
CTD Plan (BCWS)	14,304	32,186	52,092	70,151	89,327	110,405	136,649	157,358	176,122	200,299	220,712	245,571
CTD Perf (BCWP)	14,177	31,431										
CTD Actuals (ACWP)	14,626	28,651										

5.01.01-BASE OPERATIONS

WBS 5.01.01.01 – Base Operations Project Management

This element provides for the Base Operations executive management function, Project controls management, ESH&Q and Performance Assurance programs field implementation and management of assigned personnel.

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	270.0	270.0	218.8	0.0	0.0%	51.2	19.0%	
CTD	513.0	513.0	432.3	0.0	0.0%	80.6	15.7%	3,401.7

Schedule and Cost Variance Analysis: The CM and CTD schedule and cost variances are within the reporting thresholds.

WBS 5.01.01.02 –TSR/Surveillance & Maintenance

General Description:

Waste Feed Operations Safe Storage Surveillance & Monitoring: Double Shell Tank Farm operations monitoring and response activities necessary to satisfy Technical Safety Requirements (TSRs).

Engineering Program: Provide engineering functions and execute the commitments of the Chief Engineer to assure consistent application of engineering principles and practices and to provide engineering products and processes that meet the highest standards of quality.

DST TSR/ Basic Maintenance: Activities necessary to maintain Double-Shell Tank Farms, the 242-A Evaporator, and associated facilities, until storage of waste is no longer required. This includes planning and execution of work supporting hardware and systems to implement a graded approach to reliability-centered/predictive maintenance for the double-shell tanks.

DST Control Spare Parts, Materials, Tools: Management, engineering and administrative support required to maintain a spare parts system for Double-Shell Tank Farm and the 242-A Evaporator Operations. It includes the purchase of spare parts, materials, and tools, and supports fabrication of parts by offsite vendors and the onsite fabrication shop. Waste Feed Operations Radcon Surveys -Provides Double Shell Tank farm radiological surveys of on required basis (e.g. per shift, daily, weekly, monthly, quarterly, or semi-annual); and also provides updating of radiological survey maps for DST facilities.

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	3,353.2	3,319.1	1,356.8	-34.1	-1.0%	1,962.3	59.1%	
CTD	6,340.4	6,306.4	7,281.9	-34.1	-0.5%	-975.5	-15.5%	41,889.3

Schedule and Cost Variance Analysis

The CM and CTD schedule variances are within the reporting thresholds.

The CM CV of \$1,962.3K is due to:

Description/Cause: The majority of the favorable CV is the result of an accounting entry in November, to offset an October entry that was to have transferred ownership of the Spare Parts accounts from CH2MHill to WRPS. This November entry effectively "suspends" the costs entered in October associated with establishing the Spare Parts Beginning Inventory balance. The suspension of spares costs is partially offset by DST and SST TSR/Basic Maintenance labor, which is currently exceeding the planned levels.

Impact: No impact relating to spares. Maintenance will continue to experience an unfavorable CV until other Base Operations and Retrieval activities ramp up.

Corrective Action: Maintenance resources will be reassigned to support activities such as 242-A Evaporator maintenance, DST-to-DST Transfers, Tank Waste Sampling, and Catch Tank Pumping as they enter the current work window.

The CTD CV of -\$975.5K is due to:

Description/Cause: The unfavorable CV is due to SST Safe Storage & Operations and DST and SST TSR/Basic Maintenance labor that is currently exceeding the planned levels.

Impact: None at this time.

Corrective Action: The unfavorable CV is expected to peak in the second quarter of the FY and then begin decreasing as other Base Operations and Retrieval activities ramp up, such as 242-A Evaporator maintenance, DST to DST Transfers, Tank Waste Sampling, Catch Tank Pumping, C-110 and C-104 Retrievals, U-Farm HIHTL Removal/Disposal, and 244-CR Vault pumping. Substantial DST and SST Maintenance resources will be assigned to these activities.

5.01.01 – BASE OPERATIONS – CONTINUED

WBS 5.01.01.03 – TSR Administrative Controls

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	318.4	297.1	315.1	-21.3	-6.7%	-18.1	-6.1%	
CTD	604.9	583.6	606.9	-21.3	-3.5%	-23.3	-4.0%	4,399.2

Schedule and Cost Variance Analysis

The CM and CTD schedule and cost variances are within the reporting thresholds.

WBS 5.01.01.04 – Core Services

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	213.6	213.6	146.9	0.0	0.0%	66.7	31.2%	
CTD	405.9	405.9	261.2	0.0	0.0%	144.7	35.7%	2,691.8

Schedule and Cost Variance Analysis

The CM and CTD schedule and cost variances are within the reporting thresholds.

WBS 5.01.01.05 – Tank Chemistry and Integrity

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	539.0	563.9	548.8	24.9	4.6%	15.1	2.7%	
CTD	1,024.1	912.8	867.2	-111.2	-10.9%	45.6	5.0%	8,404.4

Schedule and Cost Variance Analysis

The CM and CTD schedule and cost variances are within the reporting thresholds.

5.01.01 – BASE OPERATIONS – CONTINUED

WBS 5.01.01.06- Solid Waste Management

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	456.9	456.9	570.9	0.0	0.0%	-114.0	-25.0%	
CTD	868.1	868.1	765.6	0.0	0.0%	102.5	11.8%	5,756.5

Schedule and Cost Variance Analysis

The CM and CTD schedule and cost variances are within the reporting thresholds.

5.01.02 – DST SPACE MANAGEMENT

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	593.8	393.9	90.3	-199.9	-33.7%	303.6	77.1%	
CTD	995.1	728.1	788.5	-267.0	-26.8%	-60.3	-8.3%	5,446.3

Schedule and Cost Variance Analysis

The CTD schedule and cost variances are within the reporting thresholds.

The CM schedule and cost variances are both reportable.

The CM schedule variance of -\$199.9K is due to:

Description/Cause: The unfavorable schedule variance primarily falls within the DST-to-DST Transfer and is due to being behind schedule on the 1st Recirculation of waste within Tank 241-AP-105 and the 1st DST-to-DST Transfer of waste from Tank 241-AP-105 to Tank 241-AZ-102. These two activities were initially scheduled in October, prior to the External Transfer of waste from the 219-S Building, but due to the Safety Significant valves Potential Inadequacy in the Safety Analysis (PISA) and subsequent Technical Safety Requirement (TSR) violation for past transfers, the sequence of transfers was changed. The External Transfer, which did not rely on any Safety Significant valves, was completed in November.

Impact: This account will continue to reflect an unfavorable variance until January 2009, as the two behind schedule activities are scheduled to be performed in December 2008. However, if the Safety Significant issues are not resolved in a timely manner, the unfavorable schedule variance will increase until the transfer of waste can be resumed.

Corrective Action: Significant PERs have been reported to address two issues related to transfer equipment safety classifications; 1) the Safety Significant valves that have been recently downgraded to Evaluated valves must have documentation showing that the Safety Significant designation is accurate, and 2) the TFLAN system as it relates to the Safety Significant Leak Detection System does not have the appropriate documentation to show that the TFLAN system is acceptable for use in a Safety Significant system. Engineering is addressing the issues related to both the Safety Significant pieces of equipment required for all transfers within the DST system. Until revised documentation is developed and in place for both of these Significant PERs to address the legacy issues and bring the affected systems back into compliance, the transfers will not be authorized.

The CM cost variance of \$303.6K is due to:

Description/Cause: The favorable cost variance primarily falls within the 242-A Evaporator Operations (+\$229K) due to the November reversal of the transferred Spare Parts costs entered in October. A decision was made to reverse the October entry (+\$379K) and wait until DOE has de-obligated the funds from CH2MHill and re-obligates the funds to WRPS. However, the reversal entry masked an unfavorable variance of (-\$164K) associated with maintenance and operations activities. This variance is due to unanticipated costs associated with the decontamination of the condenser room and inspection/repair of the replacement air compressors. Additionally, a favorable variance within Catch Tank Pumping (+\$69K) was realized when the External Transfer of waste from the 219-S Building to Tank 241-SY-101, was completed in one day versus the scheduled four days, as there were only 3,328 gallons of waste transferred.

Impact: No impact, the FYTD cost variance is within the reporting threshold.

Corrective Action: Once DOE has completed their evaluation of the Spare Parts, the de-obligation/re-obligation of funds will take place and a BCR will be processed to provide WRPS with the BCWS for the value of these spares. At that time, the BCWP will be taken along with the posting of the actual costs. This is currently expected to take place in January 2009. Additionally, opportunities to reduce costs and/or recover the overrun associated with the decontamination of the condenser room and inspection/repair of the replacement air compressors are being evaluated for a path forward.

5.01.03 – TOC FACILITY OPERATIONS

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	1,514.6	1,522.7	1,028.2	8.1	0.5%	494.5	32.5%	
CTD	2,877.7	2,885.8	2,405.6	8.1	0.3%	480.2	16.6%	19,567.9

Schedule and Cost Variance Analysis

The CM and CTD schedule variances are within the reporting thresholds.

The CM and CTD cost variances are reportable.

The CM cost variance of \$494.5K is due to:

Description/Cause: The favorable cost variance is due to 1) The reversal of \$260K in spares inventory costs that had been applied in October. The spares inventory is transferring from the CH2M HILL Hanford Closeout Office to WRPS. The transfer of funding from CH2MHill to WRPS will take several months and it was determined that the costs will not be applied until budget and funding becomes available; 2) The 100 megabyte HLAN upgrade that will support access to complex laboratory databases. The budget is levelized; however, the work will begin later in the fiscal year and complete by 9/30/09. With BCR RPP-09-001, this scope has been moved to WBS 5.1.3.1.5, "222S General Support" account. Also, there was less than planned support from the PRC for sampling services and procurement of stockroom supplies; and 3) The development of the 222S Laboratory Life-Extension study is levelized through the fiscal year; however, the work is scheduled to begin December 1, 2008 and complete by March 1, 2009. This work has been identified as a discrete activity within BCR RPP-09-001 and will distribute the budget representative of how the work will be performed. Also, the positive cost variance is associated with less than planned support from FH for corrective and preventative maintenance including material procurements and contractor design and calculation support. The BCWS is levelized, while the actual costs will fluctuate throughout the fiscal year depending on the type of work and resource requirements. The positive cost variance will diminish as the fiscal year progresses.

Impact: No impact is expected.

Corrective Action: ORP will de-obligate CH2M and obligate WRPS with the spares inventory funding. In addition, a BCR will be prepared to add BCWS to the baseline to cover the additional costs. The 222S Laboratory Life Extension Study has been identified as a discrete activity to begin December 1, 2008 through March 1, 2009 for \$450K. This alignment of resources in BCR RPP-09-001 will establish a monthly BCWS spread that is more representative of how the work is planned to be performed.

The CTD cost variance of \$480.2K is due to:

Description/Cause: The favorable variance is due to 1) The development of the 222S Laboratory Life-Extension study is levelized through the fiscal year; however, the work is scheduled to begin December 1, 2008 and complete by March 1, 2009. This work has been identified as a discrete activity within BCR RPP-09-001 and will distribute the budget representative of how the work will be performed. Also, the positive cost variance is associated with less than planned support from FH for corrective and preventative maintenance including material procurements and contractor design and calculation support. The BCWS is levelized, while the actual costs will fluctuate throughout the fiscal year depending on the type of work and resource requirements; and 2) The 100 megabyte HLAN upgrade that will support access to complex laboratory databases. The budget is levelized; however, the work will begin later in the fiscal year and complete by 9/30/09. With BCR RPP-09-001, this scope has been moved to WBS 5.1.3.1.5 "222S General Support" account. Also, there was less than planned support from the PRC for sampling services and procurement of stockroom supplies.

Impact: No impact is expected.

Corrective Action: The 222S Laboratory Life Extension Study has been identified as a discrete activity to begin December 1, 2008 through March 1, 2009 for \$450K. This alignment of resources in BCR RPP-09-001 will establish a monthly BCWS spread that is more representative of how the work is planned to be performed. The positive cost variance will diminish as the fiscal year progresses.

5.01.04 – TANK FARM UPGRADES

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	107.5	70.1	85.8	-37.4	-34.8%	-15.7	-22.4%	
CTD	286.4	83.4	163.0	-203.0	-70.9%	-79.7	-95.6%	3,278.2

Schedule and Cost Variance Analysis

The CM and CTD schedule and cost variances are within the reporting thresholds.

5.01.05 – PROJECT SUPPORT

WBS 5.01.05.01 – Project Integration

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	669.7	666.1	669.7	-3.7	-0.5%	-3.7	-0.6%	
CTD	1,288.0	1,284.4	1,052.2	-3.7	-0.3%	232.2	18.1%	8,392.3

Schedule and Cost Variance Analysis

The CM and CTD schedule and cost variances are within the reporting thresholds.

WBS 5.01.05.02 – Environmental, Safety, Health and Quality Assurance

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	1,242.8	1,242.8	1,089.2	0.0	0.0%	153.7	12.4%	
CTD	2,355.9	2,355.9	2,090.6	0.0	0.0%	265.3	11.3%	14,956.0

Schedule and Cost Variance Analysis

The CM and CTD schedule variances and the CTD cost variance are within the reporting thresholds.

The CM cost variance is reportable.

The CM cost variance of \$153.7K is due to:

Description/Cause: 1) Due to numerous cost corrections and corrected time cards processed in November to realign cost to the new WBS/CACN structure of the Industrial Safety Program (\$136.5K). These “fixes” result in a negligible CTD variance; 2) Environmental subcontract support cost is below planned levels (\$72.1K). The activity and resources for the EIS were incorrectly loaded in the planning baseline to end in January 2009. This is an 'all year' activity; 3) Quality Assurance under run in labor (\$57K) indicates that the work is being performed with less staff than originally planned (\$53.1K). One person has been out on STD and several others have been supporting other work outside of the QA Program; and 4) Partially offsetting unfavorable cost variance in Industrial Hygiene Program due to numerous cost corrections and corrected time cards processed in November to realign cost to the new WBS/CACN structure. These “fixes” result in a negligible CTD variance.

Impact: No impact is expected (see Corrective Action below).

Corrective Action: 1) The activity for the EIS will be re-planned in BCR RPP-09-001 which will be implemented in December (eliminating the variance); and 2) The other variances do not require corrective actions.

WBS 5.01.05.03 – Security and Emergency Services

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	57.2	57.2	74.5	0.0	0.0%	-17.4	-30.4%	
CTD	108.6	108.6	121.9	0.0	0.0%	-13.3	-12.3%	720.1

Schedule and Cost Variance Analysis

The CM and CTD schedule and cost variances are within the reporting thresholds.

WBS 5.01.05.04 – Central Engineering

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	330.4	330.4	292.3	0.0	0.0%	38.1	11.5%	
CTD	618.5	618.5	446.4	0.0	0.0%	172.1	27.8%	4,165.6

Schedule and Cost Variance Analysis

The CM and CTD schedule and cost variances are within the reporting thresholds.

WBS 5.01.05.05 – Workforce Resources

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	719.3	719.3	465.6	0.0	0.0%	253.7	35.3%	
CTD	1,366.7	1,366.7	790.9	0.0	0.0%	575.8	42.1%	9,640.3

Schedule and Cost Variance Analysis

The CM and CTD schedule variances are within the reporting thresholds.

The CM and CTD cost variances are reportable.

The CM cost variance of \$253.7K is due to:

Description/Cause: 1) TOC Training Program due to November's actual training class attendance being below planned levels, resulting in lower subcontracted tuition charges than planned (\$135.7K); and 2) Human Resources due to actual costs at variance with the level loading of the relocation budget across the year (\$94K), and Labor Relations due to actual costs at variance with the level loading of the contract support costs for re-negotiation of the bargaining unit contract (\$37K).

Impact: No impact is expected (see Corrective Actions below).

Corrective Action: 1) No corrective action is required for the Training Program as class attendance is projected to increase after the holidays resulting in reduction of the under run by the end of the fiscal year; 2) For Human Resources/Labor Relations, when BCR RPP-09-001 is approved and implemented in December, the relocation budget will be re-planned in quarterly buckets which is expected to better reflect planned relocation costs, and in the same BCR, the budget for support to the contract negotiations has been reduced to more accurately reflect the expected cost. As a result, this variance is expected to be reduced.

The CTD cost variance of \$575.8K is due to the same reasons as the CM variances. The same Corrective Actions apply.

5.01.05 – PROJECT SUPPORT – CONTINUED

WBS 5.01.05.06 – Business Services

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	1,984.0	1,984.0	1,807.0	0.0	0.0%	177.0	8.9%	
CTD	3,760.0	3,760.0	3,042.6	0.0	0.0%	717.4	19.1%	26,766.5

Schedule and Cost Variance Analysis

The CM and CTD schedule variances are within the reporting thresholds.

The CM and CTD cost variances are reportable.

The CM cost variance of \$177.0K is due to:

Description/Cause: 1) Finance Support due to performing work with less staff than planned (\$36K), Company travel cost is level-loaded across the year (\$26K), and staff training and educational reimbursements costs are less than planned (\$43K); and 2) Facility and Property Management due to labor and non-labor work adjustments made in October and November in anticipation of large electrical work tasks to be completed in December in buildings 2750E and 2704HV (\$96.4K). This will require 3 days of overtime for about 24 crafts and supervisors. The work was to be completed in September but was deferred until FY2009 due to schedule conflicts at both FH and CH2M HILL.

Impact: No impact is expected (see Corrective Actions below).

Corrective Action: 1) For Finance Support, budgets for Company travel and Business Ops staff training/educational reimbursements are being reduced in BCR RPP-09-001 to reflect the most recently planned levels of cost for the fiscal year. This BCR will be implemented for December reporting. This is expected to reduce the variances; and 2) Facility and Property Management costs are expected to stabilize consistent with the plan in December and beyond.

The CTD cost variance of \$717.4K is due to:

Description/Cause: 1) For Finance Support, the cost variance of \$406.1K is due to performing work with less staff than planned (\$85K), Company travel cost is level-loaded across the year (\$71K), taxes are being costed one month behind (\$168K), and staff training and educational reimbursements are less than planned (\$81K); and 2) For Facility and Property Management, the cost variance of \$359.6K is due to labor efficiencies (\$129K); 2101M Occupancy costs not received (\$94K); vehicle lease & mileage

(\$164K); PHMC support for duplicating (\$50K), sanitary waste, and general moves have been less than anticipated. The positive variances are partially offset by higher than anticipated PHMC costs primarily for refrigeration equipment services (RES) & vehicle/equipment maintenance (-\$73K).

Impact: No fiscal year end impacts are expected (see Corrective Actions below).

Corrective Action: 1) For Finance Support, budgets for Company travel and Business Ops staff training/educational reimbursements are being reduced in BCR RPP-09-001 to reflect the most recently planned levels of cost for the fiscal year. In addition, it has been requested that Accounting make accruals for expected tax payments, and this will reduce the one-month delay. All these actions are expected to reduce the variances and bring the costs in line with the baseline; and 2) For Facility and Property Management, looking into the RES costs for 2750E and the vehicle maintenance costs; will attempt to setup a costing profile for the remainder of the year for these two items.

WBS 5.01.05.07 – Executive Management

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	266.1	266.1	283.4	0.0	0.0%	-17.3	-6.5%	
CTD	505.6	505.6	491.7	0.0	0.0%	13.8	2.7%	3,352.6

Schedule and Cost Variance Analysis

The CM and CTD schedule and cost variances are within the reporting thresholds.

WBS 5.01.05.08 – Hanford Pension and Benefits

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	1,590.2	1,590.2	1,258.7	0.0	0.0%	331.5	20.8%	
CTD	3,021.4	3,021.4	2,149.4	0.0	0.0%	872.0	28.9%	20,036.5

Schedule and Cost Variance Analysis

The CM and CTD schedule variances are within the reporting thresholds.

The CM and CTD cost variances are reportable.

The CM cost variance of \$331.5K is due to:

Description/Cause: The pension payment was less than planned (\$148K), and the retiree medical insurance premium payment was less than planned (\$184K).

Impact: No impact is expected (see Corrective Action below).

Corrective Action: BCR RPP-09-001, to be implemented in December, will re-plan these activities to reflect a significant budget reduction and address the CM and CTD variances.

The CTD cost variance of \$872.0K is due to the same reasons as the CM variances. The same Corrective Actions apply.

5.02.01 – RETRIEVAL/CLOSURE PROGRAM

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	1,531.7	1,524.1	1,964.7	-7.6	-0.5%	-440.6	-28.9%	
CTD	2,104.4	2,075.9	2,370.8	-28.4	-1.4%	-294.9	-14.2%	25,539.4

Schedule and Cost Variance Analysis

The CM and CTD schedule variances and the CTD cost variance are within the reporting thresholds.

The CM cost variance is reportable.

The CM cost variance of -\$440.6K is due to:

Description/Cause: 1) Retrieval Technology conceptual development of the MARS (-\$199.5K; costs accrued in November for subcontractor work performed in October and higher than planned costs for WRPS support to the conceptual development); 2) Direct Push Characterization and Sampling fieldwork (-150.6K; work was accelerated in November but activities were only statused as on schedule); and 3) Surface Geophysical Exploration field work (-\$146.5K; work was accelerated in November but activities were only statused as on schedule).

Impact: Cost of the MARS conceptual development is a concern and are under evaluation for impacts.

Corrective Action: 1) For the Direct Push Characterization and Sampling fieldwork and the Surface Geophysical Exploration field work, the method of performance will be changed to more accurately reflect the work performed and revised rules of performance implemented for December reporting; and 2) For the Retrieval Technology conceptual development of the MARS, costs (contract & labor) are being monitored on a weekly basis. An estimate to complete has been requested from the vendor. Funds management activities will be evaluated after the first quarter in Retrieval/Closure. This area will probably be identified as a candidate for a plus up in funds. Other areas are being identified for a funds reduction to support this increased labor support to MARS.

5.02.02 – SST RETRIEVAL EAST AREA

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	991.1	780.0	1,154.4	-211.2	-21.3%	-374.4	-48.0%	
CTD	1,048.8	1,196.3	1,546.6	147.5	14.1%	-350.2	-29.3%	21,782.7

Schedule and Cost Variance Analysis

The CTD schedule and cost variances are within the reporting thresholds.

The CM schedule variance and cost variance are reportable.

The CM schedule variance of -\$211.2K is due to:

Description/Cause: 1) Tank C-104 retrieval delays in removing water from the 04B-Pit, awarding of procurement and construction contracts, and technical issues related to the engineering standard for pumps. The variance is also influenced by resource priority being given to restarting C-110 Retrieval Operations (-\$146.1K); and 2) Tank C-110 retrieval due to budget in November for work completed ahead of schedule in October (-\$7.1K).

Impact: Delaying the water removal from the 04B-Pit delays the removal of the failed Heel Jet Pump in Riser 13 (04B-Pit). This ultimately delays installation of the new Slurry Pump in Riser 13, and potentially the final connection of HIHTL.

Corrective Action: 1) For C-104 retrieval, efforts are underway to get the 04B-Pit pumping system installed and water removed by the end of December. This includes expediting changes to Engineering Standards 22 & 25, and ramping up construction resources; and 2) No corrective action is required for the C-110 schedule variance.

The CM cost variance of -\$374.4K is due to:

Description/Cause: 1) Tank C-110 retrieval due to labor resources being expended that were not planned on retrieval operations restart of this tank (-\$527.7K). Initial baseline planning has no engineering, startup and readiness activities since that work was complete in FY 2008. With shutdown of C-110 retrieval operations in September 2008 and transition to the TOC contractor in FY 2009, a new path forward was implemented to restart C-110 retrieval operations. The re-performance of scope plus the readiness to serve charges in C-110 have contributed to this labor overrun; 2) C Farm Infrastructure design media and engineering work performed earlier than existing rules of performance allow progress to be taken (-\$138.1K; rules of performance are evenly weighted for each period over the duration of the

activity); and 3) Above unfavorable cost variances are partially offset by a favorable variance in C-104 Retrieval (\$330.5K) due to progress earned and cost efficiencies on initiation of construction and field work.

Impact: Additional budget and funds are required to support Tank C-110 retrieval.

Corrective Action: 1) A revised Project Direction Notice (PDN) and BCR RPP-09-001 will be implemented in December to add additional funds and budget for Tank C-110 retrieval; 2) The C Farm Infrastructure rules of performance will be reviewed and possibly revised to coincide with the weighted value of the design and receipt of design media from the A-E vendor (however, performance will self-correct as the work is performed); and 3) No corrective action is required for the Tank C-104 cost variance.

5.02.03 – SST RETRIEVAL WEST AREA

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	9.8	9.8	26.0	0.0	0.0%	-16.2	-166.3%	
CTD	18.5	18.5	26.0	0.0	0.0%	-7.5	-40.2%	137.3

Schedule and Cost Variance Analysis

The CM and CTD schedule and cost variances are within the reporting thresholds.

5.02.04 – CLOSURE PROGRAM

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	181.4	196.1	49.0	14.7	8.1%	147.1	75.0%	
CTD	344.7	357.0	89.6	12.3	3.6%	267.4	74.9%	2,116.7

Schedule and Cost Variance Analysis

The CM and CTD schedule variances and the CTD cost variance are within the reporting thresholds.

The CM cost variance, while slightly below the threshold, will be reported on.

The CM cost variance of \$147.1K is due to:

Description/Cause: 1) Work on Tank Farm Risk Assessments, Closure Program Management and RCRA Closure Plan Updates not being performed per the baseline pending re-planning, but are being statused as on schedule (\$86.2K, \$32.1K and \$28.0K respectively).

Impact: No impact is expected (see Corrective Action below).

Corrective Action: The work in the three accounts is being re-planned in BCR RPP-09-001 to align with the IMPB Revision 2 including revised BCWS, BCWP and funds. The BCR and a revised PDN will be implemented in December.

5.02.05 – SST CLOSURE

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	196.2	33.6	-20.3	-162.7	-82.9%	53.9	160.5%	
CTD	312.8	57.0	2.3	-255.8	-81.8%	54.7	95.9%	4,039.7

Schedule and Cost Variance Analysis

The CTD schedule variance and the CM and CTD cost variances are within the reporting thresholds.

The CM schedule variance of -\$162.7K is due to:

Description/Cause: FY09 to FY10 deferral of Closure Demonstration work for 244-U and C-301.

Impact: No impact is expected (see Corrective Action below).

Corrective Action: This work is being deferred in BCR RPP-09-001 to align with the IMPB Revision 2 including revised BCWS, BCWP and funds. The BCR and a revised PDN will be implemented in December.

5.03.01 – WTP FEED DELIVERY PROGRAM

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	604.4	606.1	448.0	1.7	0.3%	158.1	26.1%	
CTD	1,148.4	1,150.0	710.8	1.6	0.1%	439.2	38.2%	7,255.4

Schedule and Cost Variance Analysis

The CM and CTD schedule variances and the CTD cost variance are within the reporting thresholds.

The CM cost variance is reportable.

The CM cost variance of \$158.1K is due to:

Description/Cause: 1) Waste Feed Delivery Engineering contracts were not started due to need to re-plan the work (\$70.2K); 2) Tank Waste Database Management work labor efficiencies (performing work with less staff than planned) and utilizing planned staff to perform tasks in other departments (\$36.7K); 3) WFD Technology Development labor under runs due to vacant positions; minimal work has been performed to date (\$27.2K); and 4) Manage DST Research and Technology Program Technical Basis labor under runs and delays in selection of an engineering company and release of the contract for the computer modeling/prediction of tank mixing system capabilities task (\$21.7K).

Impact: No impact is expected.

Corrective Action: A BCR will be prepared to replace the Waste Feed Delivery engineering contract activity; 2) Tank Waste Database Management subcontracts for staff augmentation support will be awarded in December which will reduce the under run; 3) WFD Technology Development vacant WRPS staff positions are being filled and subcontracts for staff augmentation support will be issued to support the start of this work in December; and 4) The Manage DST Research and Technology Program Technical Basis subcontract task will be re-planned via BCR RPP-09-001 and moved to the WFD Technology Development account, eliminating the CV. Also, the labor under run will be corrected by alignment of the manager's charging to this account.

5.03.02 – CONSTRUCT DST RETRIEVAL SYSTEMS

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	82.2	82.2	45.8	0.0	0.0%	36.3	44.2%	
CTD	156.1	156.2	78.6	0.0	0.0%	77.6	49.7%	1,091.0

Schedule and Cost Variance Analysis

The CM and CTD schedule and cost variances are within the reporting thresholds.

5.03.06 – IMMOBILIZATION PROGRAM

November 2008 (K\$)

	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	BAC
CM	59.0	59.0	55.2	0.0	0.0%	3.8	6.5%	
CTD	112.1	112.1	68.2	0.0	0.0%	44.0	39.2%	743.6

Schedule and Cost Variance Analysis

The CM and CTD schedule and cost variances are within the reporting thresholds.

The CTD schedule variance of -\$754.9K is minor and does not warrant a significant concern as it is not anticipated to impact the project critical path. The schedule variance is driven by work that has been impacted by ongoing efforts to identify work priorities and budget adjustments to align with the anticipated FY 2009 funding. Adjustments were necessary to develop the FY09 Interim Performance Measurement Baseline.

The main contributors are DST Space Management (sequence change in waste transfers and Evaporator decontamination and training); Tank Farm Upgrades (cathodic protection system drawing updates), SST Closure Demonstration (deferral of work to FY10); and C-104 Retrieval (removal of water from Pit 04B and award of construction contract). Baseline re-planning will be implemented in December 2008 via BCR RPP-09-001.

The CM CV of \$3,229.2K is driven by November removal of approximately \$3.1M of costs accrued in October for the value of spares assets transferred from CH2M HILL to WRPS. These costs were appropriately removed, eliminating the cost variance, pending reconciliation of the inventory and incorporation of the spares in the WRPS TOC baseline

Milestone M-45,-50,-60 Single-Shell Tank Corrective Action

I. Near-Term Deliverables:

- **M-45-56E, Complete Implementation of Agreed to Interim Measures**
Due: 07/31/09
Status: On Schedule. .
- **M-45-58, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Master Work Plan that describes the proposed approach for the completion of Corrective Action to meet Final Closure Requirements in the Waste Management Areas as described in Appendix I, Section 2.3**
Due: 12/31/08
Status: Complete. Report transmitted by ORP/RL to Ecology on December 23, 2008.
- **M-45-60, Submit to Ecology for review and approval as an Agreement primary document DOE's Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C**
Due: 12/31/08
Status: Complete. Report transmitted by ORP/RL to Ecology on December 19, 2008.
- **M-45-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RCRA Facility Investigation/Corrective Measures Study Report for WMA C**
Due: 12/31/10
Status: At Risk. See issues below.
- **M-45-62, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Corrective Measures Implementation Work Plan for WMA C**
Due: 7/31/12
Status: At Risk. See issues below.

II. Significant Accomplishments:

- T-Farm interim barrier monitoring continues.
- Continued investigations for interim surface barriers in TY and SX Tank Farms.
- Collecting spectral gamma information in T farm to support barrier effectiveness evaluation.
- WMA C data quality objectives and associated work plan and sampling/analysis plan (M-45-60) completed.
- Master work Plan (M-45-58) completed.

- Completed field work testing of surface geophysical exploration using deep electrodes in C Farm.

III. Significant Planned Actions in the Next Six Months:

- Complete direct push activities in TY Farm in support of an interim surface barrier.
- Initiate next phase of surface geophysical exploration in SX Farm.
- Initiate direct push characterization in C Farm per the Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C.

IV. Issues

- The transmittal letter for M-45-50 (WMA C work plan and SAP) indicated that the scope of characterization activities identified in the plan could not be completed in time to support the currently scheduled dates for M-45-61 and M-45-62. Discussion of a change proposal will be initiated.
- There is no apparent maintenance plan for the ongoing maintenance of interim measures.

Milestone M-45-00, Complete Closure of All Single-Shell Tank Farms SST Retrieval and Closure Program

I. Deliverables

- **M-45-00, Complete Closure of all Single-Shell Tank Farms**
Due: 9/30/24
Status: To Be Missed (Based on current DOE Baseline planning).
- **M-45-00B, Complete Specified "Near-Term" SST Waste Retrieval and Interim Closure Activities, to Result in the Retrieval of all Tank Wastes in WMA-C SSTs Pursuant to the Agreement Criteria in Milestone M-45-00**
Due: 9/30/06 (Or as otherwise indicated within the descriptive text of this milestone.)
Status: Missed.
 - Completion of four limits of technology retrieval demonstrations:
 - Saltcake dissolution (S-112): Completed (M-45-03C).
 - Modified sluicing (C-106): Completed.
 - Vacuum retrieval (C-200s): Completed; C-203 field retrieval operations completed on 3/24/05; C-202 retrieval completed on 8/11/05; C-201 retrieval completed on 3/23/06; C-204 retrieval completed on 12/11/06.
 - Mobile retrieval (C-101, C-105, or C-111): C-101 start of retrieval is currently projected for FY 2011 (October 2010).
 - Implementation of full-scale LDMM technologies for the first three 100-series tank retrievals following Tank S-112:
 - Tank S-102: High Resolution Resistivity System (HRR) installed; supporting retrieval operations.
 - Tank C-103: HRR demonstration complete.
 - Tank C-108: HRR installed; supporting retrieval operations.
 - Completed HRR injection tests at S-102.
 - Submitted HRR evaluation report and recommendation for further deployment.
 - Submittal of TWRWPs:
 - Five (5) 100-series tanks by 1/31/05: Completed on 1/24/05 (C-101, C-105, C-110, and C-111). Approved by Ecology on 1/7/09.
- **M-45-00C, Initiate Negotiation of SST Waste Retrieval and Closure Activities and Associated Schedules (for the Period February 2007 through August 2008)**
Due: 9/30/06
Status: Missed.

- **M-45-00D, Initiate Negotiation of the SST Waste Retrieval and Closure Activities (for the Period September 2008 to September 2013)**
Due: 1/31/08
Status: Missed.
- **M-45-00E, Initiate Negotiation of SST Waste Retrieval and Closure Activities for the Remainder of the SST Program**
Due: 10/31/12
Status: To Be Missed (Based on current DOE Baseline planning).
- **M-45-05, Retrieve Waste from all Remaining Single-Shell Tanks**
Due: 9/30/18
Status: To Be Missed (Based on current DOE Baseline planning).
- **M-45-05-T05, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**
Due: 9/30/07
Status: Missed.
- **M-45-05-T06, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**
Due: 9/30/08
Status: Missed.
- **M-45-05-T07, Initiate Tank Retrieval from Seven Additional Single-Shell Tanks**
Due: 9/30/09
Status: To Be Missed (Based on current DOE Baseline planning).
- **M-45-05-T08, Initiate Tank Retrieval from Eight Additional Single-Shell Tanks**
Due: 9/30/10
Status: To Be Missed (Based on current DOE Baseline planning).
- **M-45-05-T09, Initiate Tank Retrieval from Ten Additional Single-Shell Tanks**
Due: 9/30/11
Status: To Be Missed (Based on current DOE Baseline planning).
- **M-45-05-T10, Initiate Tank Retrieval from 12 Additional Single-Shell Tanks**
Due: 9/30/12
Status: To Be Missed (Based on current DOE Baseline planning).
- **M-45-05-T11, Initiate Tank Retrieval from 14 Additional Single-Shell Tanks**
Due: 9/30/13
Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-05-T12, Initiate Tank Retrieval from 17 Additional Single-Shell Tanks**
Due: 9/30/14
Status: To Be Missed (Based on current DOE Baseline planning).
- **M-45-05-T13, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**
Due: 9/30/15
Status: To Be Missed (Based on current DOE Baseline planning).
- **M-45-05-T14, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**
Due: 9/30/16
Status: To Be Missed (Based on current DOE Baseline planning).
- **M-45-05-T15, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**
Due: 9/30/17
Status: To Be Missed (Based on current DOE Baseline planning).
- **M-45-06, Complete Closure of all Single-Shell Tank Farms in Accordance with Approved Closure/Post Closure Plan(s)**
Due: 9/30/24
Status: To Be Missed (Based on current DOE Baseline planning).
- **M-45-06-T03, Initiate Closure Actions on a WMA Basis**
Due: 3/31/12
Status: To Be Missed (Based on current DOE Baseline planning).
- **M-45-06-T04, Complete Closure Actions on one WMA**
Due: 3/31/14
Status: To Be Missed (Based on current DOE Baseline planning).

II. Significant Accomplishments

- HRR is fully functional procedurally and in the field to support retrieval.
-

III. Significant Planned Activities in the Next Six Months

- Complete modifications to AN-106 and continue retrieval of tank C-110.
- Initiate design of retrieval system for Tank C-111 (February 2009).

IV. Issues

-
- Milestones M-45-00B (retrieve all C-Farm tanks), M-45-00C (initiate negotiations on SST retrievals for 2007-2008), and M-45-00D (initiate negotiations on SST retrievals for 2008-2013) were missed. TPA negotiations to address these and other milestones are ongoing.
- Ecology formally requested re-start dates for C-108, C-109, C-110 and S-102 in a letter dated October 13, 2008. Restart dates for these retrievals are in the process of being identified.

C-FARM RETRIEVAL SUMMARY SCHEDULE FORECASTS ^a

Tank	Final Design Drawings complete	Construction Complete	Process Control Plan Complete	Start Retrieval	Complete Retrieval	TSAP Complete	Retrieval Data Report or Appendix H to Ecology/EPA
C-101	7/2/09	8/5/10	9/1/10	10/1/10	1/6/12	12/6/11	9/27/12
C-102	1/14/11	10/13/11	12/9/12	1/9/12	11/20/12	10/20/12	11/18/13
C-103	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-104 ^c	TBD	TBD	TBD	TBD	TBD	TBD	TBD
C-105	5/2/12	6/5/13	7/30/13	8/30/13	3/6/14	2/6/14	12/4/14
C-106	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-107	3/21/14	12/19/14	2/26/15	3/26/15	12/18/15	11/18/15	4/26/17
C-108 ^d	Complete	Complete	Complete	Complete	TBD	TBD	TBD
C-109 ^{de}	Complete	Complete	Complete	Complete	TBD	TBD	TBD
C-110 ^{bc}	Complete	Complete	Complete	Complete	9/30/09	8/30/09	7/6/10
C-111	TBD	TBD	TBD	TBD	TBD	TBD	TBD
C-112	10/18/13	7/23/14	9/9/14	10/9/14	3/25/15	2/25/15	3/1/17
C-201	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-202	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-203	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-204	Complete	Complete	Complete	Complete	Complete	Complete	Complete

a. Completion dates are based on the statused December month-end Integrated Mission Execution Schedule (IMES) as of 12/28/08 and are subject to change as efforts continue to identify and implement schedule efficiencies.

b. Projected dates for C-110 are based on utilizing Modified Sluicing technology and availability of acceleration funding.

c. Schedules are being updated for inclusion of S-102 corrective actions and compensatory measures.

d. Sluicing was performed to the limits of the sluicing system technology.

e. Hard Heel Retrieval using MRT complete to limits of technology, not achieving less than 360 cu ft residual, awaiting future retrieval path forward.

SST RETRIEVAL SEQUENCE DOCUMENT

I. Deliverables

- **M-45-02N, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02N for further details)**
Due: 3/1/08 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
Status: Complete.
- **M-45-02N-A, Embedded Milestone; Within 60 days of receiving the DST Space Evaluation Document, the Three Parties Shall meet to Establish New Milestones, If Required, for Acquisition of Additional Tanks**
Due: 06/02/08
Status: On May 15, 2008, Ecology transmitted comments on the M-45-02N deliverable. On July 23, 2008, ORP transmitted letter 08-TF-049 to Ecology with a plan for responding to Ecology comments on and updating the Retrieval Sequence Document (RPP-21216). The revised document was submitted to Ecology on September 12, 2008, by letter 08-TF-062. Ecology has requested more time to review the document.
- **M-45-02O, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02M for further details)**
Due: 3/1/10 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
Status: On schedule. Ecology has requested the Parties meet to discuss the methodology and contents of the next biennial update.
- **M-45-02P, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (see Text of M-45-02M for further details)**
Due: 3/1/12 (Biennially thereafter. Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
Status: On schedule.
- **M-45-02P-A, Embedded Milestone; Within 60 days of receiving the DST Space Evaluation Document, the Three Parties Shall meet to Establish New Milestones, If Required, for Acquisition of Additional Tanks**
Due: 4/30/10
Status: On schedule.

II. Significant Accomplishments

None.

III. Significant Planned Activities in the Next Six Months

- None.

IV. Issues

- Ecology approval of the M-45-02N submittal is still outstanding.

TANK RETRIEVALS WITH INDIVIDUAL MILESTONES

Tank 241-C-106

I. Deliverables

- **M-45-05M-T01, Submit C-106 Waste Retrieval Results, Analysis of Residual Waste(s), and (if appropriate) Request for Exception to the Criteria Pursuant to Agreement Appendix H**
Due: 2/27/04
Status: Complete.

II. Significant Accomplishments

- None.

III. Significant Planned Activities in the Next Six Months

- Continue NRC review of the C-106 exception request. A Request for Additional Information (RAI) is expected from the NRC in January 2009.
- Continue Performance Assessment workshops with Ecology.

IV. Issues

- C-106 Closure Plan approval and SST radiological Categorical Notice of Construction (NOC) Phase 3 (closure) and a toxics categorical NOC application are pending completion of the Tank Closure and Waste Management Environmental Impact Statement (EIS) and associated Record of Decision (ROD); forecast completion for the final EIS ROD is January 2010.

Tank 241-S-102

I. Deliverables

- **M-45-05A, Complete Waste Retrieval from Tank S-102**
Due: 3/31/07
Status: Missed. As a result of equipment failure on March 14, 2007, retrieval operations were suspended at Tank S-102 with retrieval approximately 91% complete and approximately 423,000 gallons total waste removed. Retrieval restarted on July 25, 2007 but suspended after a waste spill on July 27, 2007. The HRR is currently shut down.
- **M-45-15, Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project**
Due: 6/30/11
Status: On Schedule. Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

- **M-45-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**
Due: 6/30/11
Status: On schedule.
- **M-45-15B, Embedded Milestone, Remaining Wastes have been adequately Characterized, and a Risk Assessment has been completed for residuals that remain in the tank**
Due: 6/30/11
Status: On schedule.
- **M-45-15C, Embedded Milestone, An update to the S-102 Component Closure Activity Plan has been submitted by DOE**
Due: 6/30/11
Status: On schedule.
- **M-45-15D, Embedded Milestone, if appropriate, DOE has requested an exception to waste retrieval criteria pursuant to Agreement Appendix H**
Due: 6/30/11
Status: On schedule.

II. Significant Accomplishments

- None.

III. Significant Planned Activities in the Next Six Months

None.

IV. Issues

- Retrieval of Tank 241-S-102 was not completed by TPA milestone date of March 31, 2007, due to pump failure.
- On July 27, 2007, a leak of up to 85 gallons of tank waste occurred from the S-102 pumping system. Operations were suspended and recovery actions started.

Tank 241-S-112

I. Deliverables

- **M-45-03C, Complete Full-Scale Saltcake Waste Retrieval Technology Demonstration at Single-Shell Tank S-112**
Due: 6/30/05
Status: Complete.
- **M-45-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project**
Due: 6/30/11
Status: On Schedule. Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

- **M-45-13A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**

Due: 12/31/07

Status: Completed (ORP letter, 07-TPD-066, dated 12/21/07). Added by Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

- **M-45-13B, Embedded Milestone, Remaining Wastes have been adequately Characterized, and a Risk Assessment has been completed for residuals that remain in the tank**

Due: 12/31/07

Status: Complete (ORP letter, 07-TPD-066, dated 12/21/07). Added by Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

- **M-45-13C, Embedded Milestone, An update to the S-112 Component Closure Activity Plan has been submitted by DOE**

Due: 6/30/11

Status: On schedule.

- **M-45-13D, Embedded Milestone, if appropriate, DOE has requested an exception to waste retrieval criteria pursuant to Agreement Appendix H**

Due: 6/30/11

Status: On schedule.

II. Significant Accomplishments

- Ecology letter of 8/28/08 concurred with ORP that retrieval of Tank S-112 is complete.

III. Significant Planned Activities in the Next Six Months

- None.

IV. Issues

- None.

Interim Stabilization Consent Decree

I. Near-Term Deliverables:

D-001-00, Complete Interim Stabilization of all 29 SSTs

Due: 09/30/04

Status: Completed on 03/18/04 with discontinuation of pumping in U-108 and subsequent consultation with Ecology staff. Interim stabilization of S-102 and S-112 held in abeyance by third amendment to the Consent Decree; these two tanks are undergoing retrieval. ORP's obligation to interim stabilize S-102 and S-112 will be satisfied upon completion of retrieval operations. Retrieval of S-102 has been impacted by the spill at this tank.

II. Significant Accomplishments:

Completed video to quantify amount of free liquid in tank.

III. Significant Planned Actions in the Next 6 Months:

IV. Issues

Tank S-102 retrieval not completed by milestone M-45-05A date of March 31, 2007. The spill at S-102 will delay completion of this milestone.

In Tank Characterization and Summary

For the period from December 1 – December 31, 2008:

I. Accomplishments:

- Completed document RPP-PLAN-39120, *Tank 241-AW-106 Grab Sampling and Analysis Plan in Support of Evaporator Campaign for Fiscal Year 2009*, Rev. 0, on December 19, 2008.
- Completed document RPP-30604, *Tank Farms Safety Analysis Chemical Source Term Methodology*, Rev 1 on December 19, 2008.
- Completed document HNF-SD-WM-DQO-014, *242-A Evaporator Data Quality Objectives*, Rev 5, on December 4, 2008.

II. Planned Action within the next Six Months:

- Tank Sampling
 - Tank 241-AZ-102 liquid grab samples scheduled for May 2009.
 - Tank 241-AP-107 liquid grab samples scheduled for April 2009.
 - Tank 241-AW-106 liquid grab samples scheduled for February 2009.
 - Tank 241-AN-106 liquid grab samples (mid C-110 retrieval) scheduled for February 2009.
 - The 244-CR Vault grab samples scheduled for February 2009.
 - Tank 241-AY-101 liquid grab samples scheduled for March 2009.
 - Tank 241-AN-103 core samples scheduled for March 2009.
 - Tank 241-UX-302A grab samples scheduled for April 2009.
- BBI Updates
 - Eight tank updates are scheduled for the first quarter of FY 2009.
 - Seven of the eight updates have been completed.
 - Publication of the FY09 Quarter 1 updates is scheduled for January 15, 2009.
- DQOs
 - Complete SST Component Closure DQO, Rev. 4 in March 2009.
 - Complete Evaporator DQO Revision 6 in August 2009

III. Issues:

- None.

Milestone M-47-00, Complete Work Necessary to Support Acquisition and Phase I Operations of Hanford Site High-Level Radioactive Waste Treatment, Storage, and Disposal Facilities

I. Near-Term Deliverables:

- **M-47-03A, Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial high-level waste feed tank**
Due: 03/31/09
Status: Will Be Missed. Pending path forward with Ecology for renegotiation of new milestone commitments.
- **M-47-06, Complete negotiation of additional agreement requirements (milestones, target dates, and associated language) governing work necessary to support completion of treatment complex Phase I operations by 2018**
Due: 06/30/10
Status: Negotiations are not yet underway.

II. Significant Accomplishments:

- None.

III. Significant Planned Actions in the Next Six Months:

- None.

IV. Near-term Actions Needed by DOE or Ecology:

- None.

V. Issues:

- Nothing to report.

242-A Evaporator Status (previously reported under Milestone M-48, which has been closed out).

EVAPORATOR CAMPAIGNS

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY08	08-CR	None	(AW-102/ AP-104)	A Cold Run to complete 242-A monitoring and control system (MCS) upgrades and equipment testing, and personnel training is underway. Flush water will be discharged to either AP-104 or AW-102.
FY09	09-01	AP-101/AP-105	AP-104	Previously planned as 08-01, this campaign has been deferred into February/March 2009 and will be performed as 09-01. This deferral is required to support the safe and orderly resumption of operations under the new Tank Operation Contract, and implementation of a new contract baseline.
FY09	09-02	AP-101/AP-105	AP-104/ AP-101	Previously planned as 08-02, this campaign has been deferred into March/April 2009 and will be performed as 09-02 immediately following 09-01. This deferral is required to support the safe and orderly resumption of operations under the new Tank Operation Contract, and implementation of a new contract baseline.
FY10	10-01	AW-106	AP-101	Detailed planning for FY10 and outyear campaigns subject to retrieval activities and Tank Operations Contractor commitments and requirements. Forecast FY10 campaigns are based on preliminary planning associated with blending AZ-102.
FY10	10-02	AP-107	AP-101/ AP-107	Detailed planning for FY10 and outyear campaigns subject to retrieval activities and Tank Operations Contractor commitments and requirements. Forecast FY10 campaigns are based on preliminary planning associated with blending AZ-102.

Milestone M-90-00, Complete Acquisition of New Facilities, Modifications of Existing facilities, and/or Modifications of Planned Facilities, as Necessary for Storage of Hanford Site Immobilized High Level Waste (IHLW), Immobilized Low Activity Waste (ILAW), and Disposal of ILAW, and M-20-00, Submit Part B Permit Applications

I. Near-Term Deliverables:

- **M-90-10, Ready to Accept Placement of ILAW Waste in ILAW Disposal Facility**

Due: 8/31/08

Status: Complete.

- **M-90-11, Complete Canister Storage Facility Construction**

Due: 8/31/10

Status: To Be Missed. To be renegotiated to align with WTP schedule.

II. Significant Accomplishments:

- None to report.

III. Significant Planned Actions in the Next Six Months:

- None to report.

IV. Issues

- None to report.

Milestone M-62-00, Complete Pretreatment Processing and Vitrification of Hanford High-Level (HLW) and Low-Activity (LAW) Tank Wastes

I. Near-Term Deliverables:

- **M-62-00, Complete Pretreatment Processing and Vitrification of Hanford High-Level (HLW) and Low-Activity (LAW) Tank Wastes**

Due: 12/31/2028

Status: To Be Missed.

- **M-62-00A, Complete WTP Pretreatment Processing and Vitrification of Hanford HLW and LAW Tank Wastes**

Due: 02/28/2018

Status: To Be Missed.

- **M-62-01R, Submit Semi-Annual Project Compliance Report**

Due: 01/31/2009

Status: On Schedule.

- **M-62-01S, Submit Semi-Annual Project Compliance Report**

Due: 07/31/2009

Status: On Schedule.

- **M-62-07B, Complete Assembly of Low Activity Waste Vitrification Facility Melter #1 So That It Is Ready for Transport and Installation in the LAW Vitrification Building (BNI Baseline Schedule Activity 4DL321A200 as Part of DOE Contract No. DEAC27-01RV14136), and Complete Schedule Activity ID 4DH46102A2 – Move #1 Melter into the High Level Waste Vitrification Facility**

Due: 12/31/2007

Status: Missed.

- **M-62-08, Submittal of Hanford Tank Waste Supplement Treatment Technologies Report, Draft Hanford Tank Waste Treatment Baseline and Draft Negotiations Agreement in Principle**

Due: 06/30/2006

Status: Missed –

- **M-62-09, Start Cold Commissioning – Waste Treatment Plant**

Due: 02/28/2009

Status: To Be Missed (based on current DOE Baseline planning).

- **M-62-10, Complete Hot Commissioning – Waste Treatment Plant**

Due: 01/31/2011

Status: To Be Missed (based on current DOE Baseline planning).

- **M-62-11, Submit a Final Hanford Tank Waste Treatment Baseline**

Due: 06/30/2007

Status: Missed.

II. Significant Accomplishments:

- None to report.

III. Significant Planned Actions in the Next Six Months:

- The Early Law initiative is currently on hold, pending further funding for FY09. Should funding be made available, planned work scope will include R&D testing of an in-tank alternative and a review of several configurations; i.e., vault system, in-tank system.

IV. Issues:

- None.

Hanford Waste Treatment and Immobilization Plant (WTP) Project

Waste Treatment and Immobilization Plant

There are 1,471 people assigned to the WTP construction site (all facilities) - - 910 manual and 561 non-manual. Overall project percent complete is 47%. Design and engineering is 76% complete and construction is 40% complete. Budgeted Cost of Work Scheduled (BCWS) through November is \$138M, Budgeted Cost of Work Performed (BCWP) is \$105M and Actual Cost of Work Performed (ACWP) is \$113M. BNI is behind schedule and over-budget for the period. The schedule variance is due to Engineering and Construction performance.

Poor cost and schedule performance continues for the project. Internal and external reviews have resulted in planned corrective actions for the project including a stronger focus on engineering training and staff retention, development of a focused equipment group to improve the procurement process, adding senior staff, and clarifying roles and responsibilities. Bechtel National Inc. (BNI) has also submitted a plan to revise the Over-Target Baseline. The plan will re-align the current schedule to incorporate emergent work and more accurately reflect equipment and material costs. A team, including staff from DOE, the Office of Engineering and Construction Management (OECM) and the Consolidated Business Center (CBC), will review and evaluate the plan.

The final negotiated contract modification between DOE and BNI has been submitted to the Office of Acquisition and Project Management (EM-50). The modification is expected to be finalized in early January 2009.

Due to design evolution and numerous other technical issues and plant modifications, the electrical demand of 55 megawatts (MW) for WTP may be exceeded. Current estimates are in the 66 MW range and do not include some items such as the administration building. These numbers do include 5% electrical losses, 15% contingency, and 15% design growth. BNI and ORP are working together to determine impacts and a path forward.

In December 2008, BNI was asked to evaluate potential modifications to the Material At Risk (MAR) used in the WTP accident analyses, shielding, and equipment design. To expedite the development of recommendations and a path forward, a team of experts was convened to help expedite the development of recommendations and implementation. Team members include

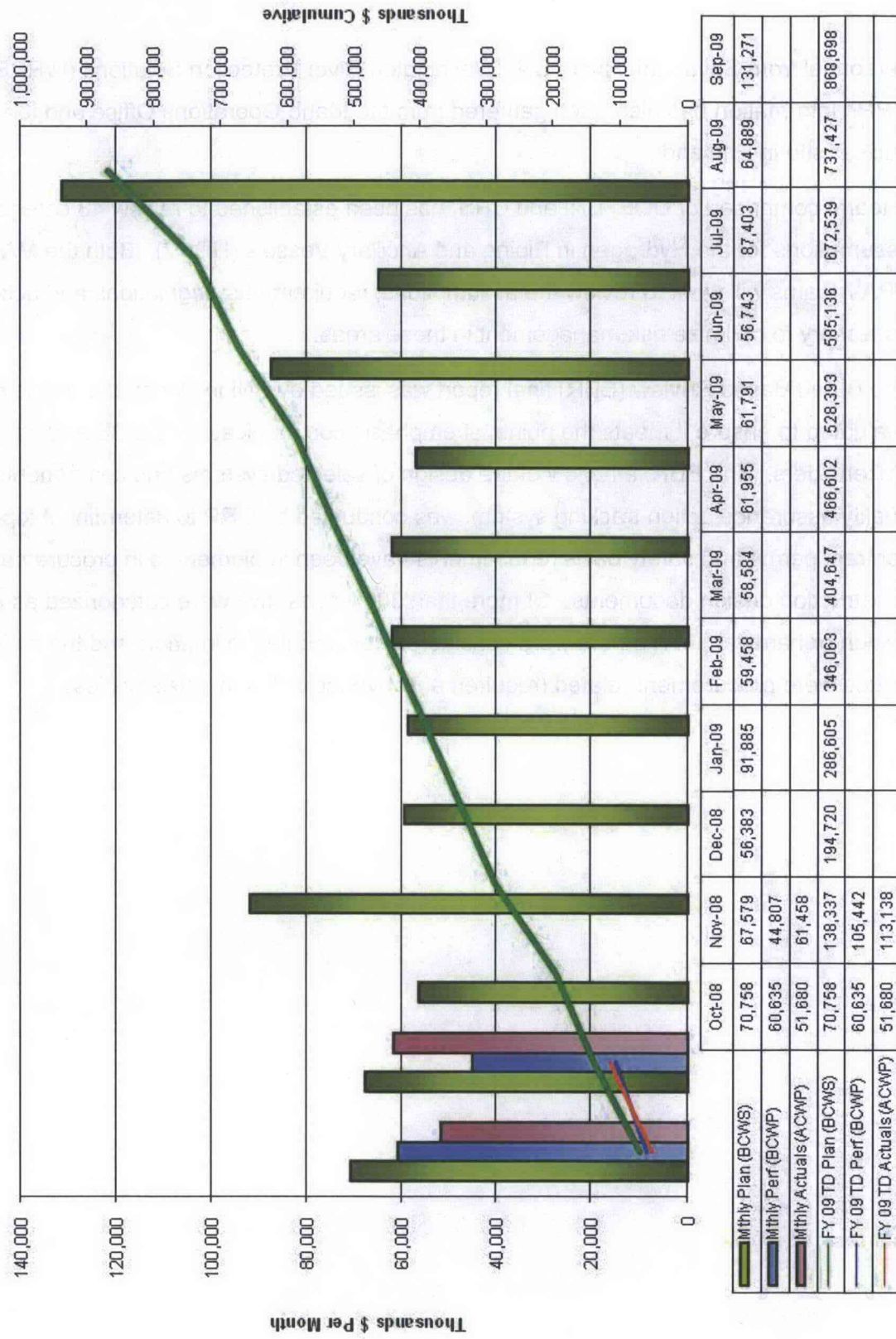
personnel from Savannah River, BNI, Washington River Protection Solutions (WRPS), and the ORP. Information has also been gathered from the Idaho Operations Office and the Sellafield nuclear site in England.

A team, comprised of DOE, BNI and URS, has been established to review 43 categorized assumptions for the Hydrogen in Piping and Ancillary Vessels (HPAV). Both the MAR and the HPAV teams will work to review the assumptions, requirements, regulations and actions necessary to optimize risk management in these areas.

The Broad Based Review (BBR) final report was issued by BNI in December and is being evaluated to ensure it meets the points of emphasis communicated by DOE and other stakeholders. The BBR, a review of the design of selected systems and components and the quality assurance action tracking system, was conducted by ORP to determine if top-level contract permit and safety basis requirements have been implemented in procurement and construction design documents. Of more than 300 issues, two were categorized as affecting design or hardware. All others were considered documentation impacts and the majority of the issues were procurement related (requirements overlooked or inconsistencies).

Total Project - WTP Fiscal Year to Date Performance (\$ In Thousands)

October 2008 - September 2009



Pretreatment (PT) Facility

The PT Facility will separate radioactive tank waste into high-level waste (HLW) and low-activity waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Facility construction began in November 2002 with a scheduled construction completion date of October 2014. Overall percent complete is 40%, design is 68% complete, and construction is 26% complete.

Cost and schedule performance continues to decline. Corrective actions have been implemented to improve project performance including development of a focused equipment group, adding senior staff, and clarifying roles and responsibilities. BNI has also submitted a plan to re-align the current schedule to incorporate emergent work and more accurately reflect equipment and material costs. DOE will review the plan in January and provide BNI comments. A team, including staff from DOE, the Office of Engineering and Construction Management (OECM) and the Consolidated Business Center (CBC), will review and evaluate the plan in January, after it has been submitted.

Even though progress is slower than planned, all calculations and piping and instrumentation diagrams required to support the PT facility system committed design were issued last month. Eight component information system lists and more than 180 isometric drawings were also issued. The manipulator storage rack was released for shipment and material requisitions were issued for small-bore rigid process jumpers, jumper support frames and nozzle frame fabrications. This will support mobilizing the jumper vendors to produce the support qualification documentation in advance of jumper and frame fabrication.

Construction installations in December included over 2,821 ft² of formwork, 1,146 ft² of metal decking, 105 tons of rebar, and 45,683 lb of embeds. Over 46 tons of tier 2 structural steel was also erected.

Severe winter weather conditions at the construction site forced delays and construction site closures. This combined with design changes to previously installed conduit and drain piping resulted in the cancellation of four planned pours. Despite weather delays some construction activities continued including the staging of hot cell crane rails and preparing the crane rail beam seats; assembly of wall curtains with rebar and embeds north of the facility; installation of shield door No. 7; components and drain lines at the southeast corner; and abrasive blasting and applying coatings in the northeast corner. Crews also continue work on grillage in the facility's south end as welding procedures related to the grillage become available. Installation

of stainless steel liner plate on the grillage is being delayed by preparation of the welding procedure. At the +28' elevation, crews are installing beam seats and erecting structural steel at the southeast and installing containment at the north face ahead of coatings in the corridor. At the 56' elevation, crews are proceeding to install forms, rebar, and commodities for slabs and walls, and to perform abrasive blasting in the southeast.

The Pretreatment Engineering Platform (PEP) was fabricated to perform a quarter-scale test of the capability of WTP ultrafiltration system and leaching processes. Simulant shakedown/functional testing, which began on November 21, 2008, was completed January 11, 2009. Pacific Northwest National Laboratory, Bechtel National, Inc., and ORP will review results and simulant testing performance during the week of January 12, 2009, to determine if further testing is required prior to proceeding into integrated testing. In addition to this review, ORP will assess recent concerns with conduct of operations/testing that include improper valve alignment and foreign material controls. PEP equipment work planned for this week includes pressure relieve modifications to the ultrafiltration loop, replacement of level instruments in pulse jet mixers, and realignment of the ultrafiltration vessel filter loop return nozzle. This work must be completed prior to Phase 1 integrated testing, which is expected to begin the week of January 19, 2009.

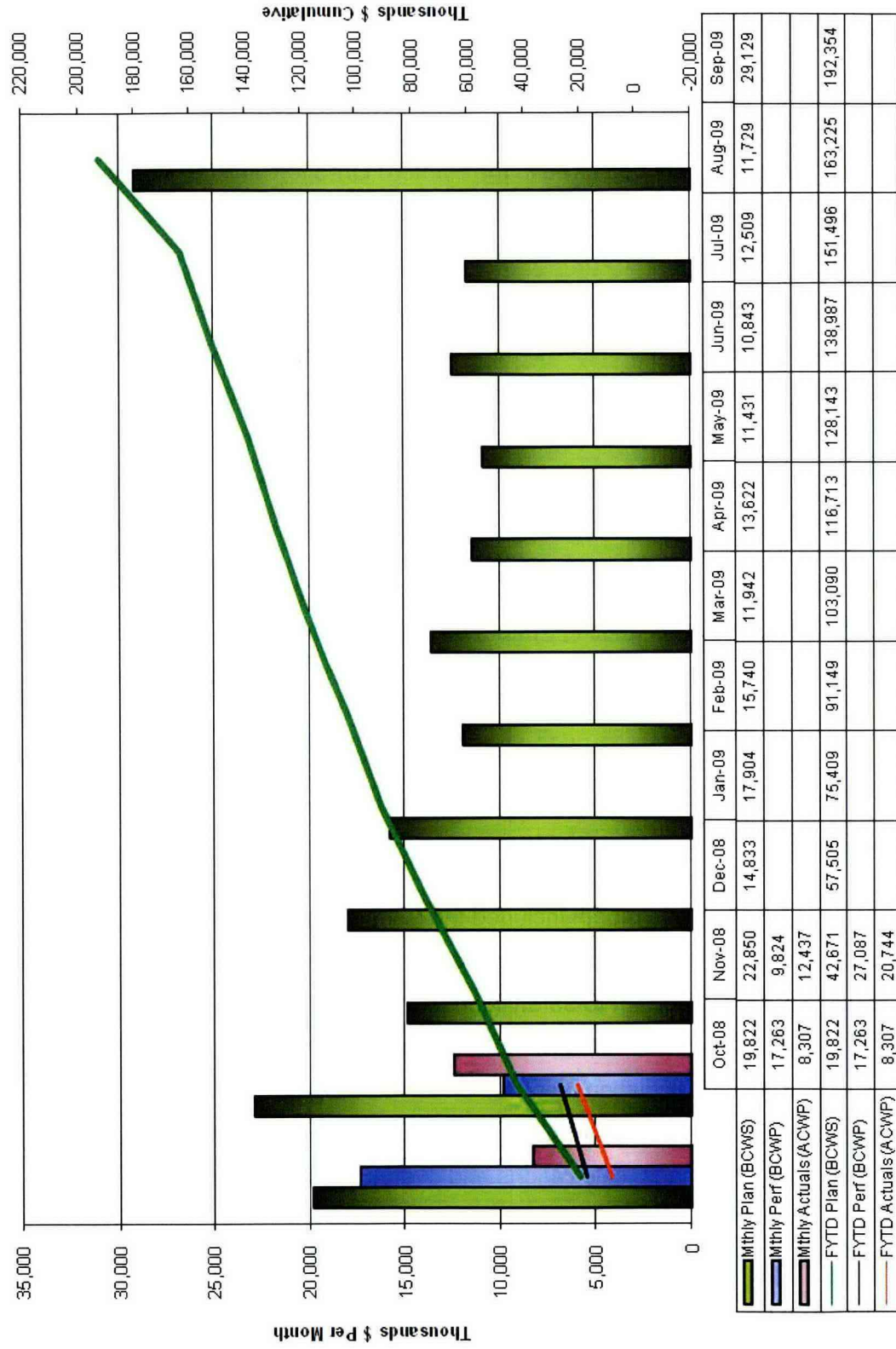
Replanning of the second phase of the testing is required, to respond to the External Flowsheet Review Team (EFRT) issue M3. Mixing continues with BNI and ORP nearing consensus on the plan. The Phase 1 testing report has been completed and submitted to DOE and the 90% design review for the prototypic test stand for Phase 2 testing has been completed. Fabrication of the test stand has been initiated.

The following table provides a status of near-term gatepost milestones for the PT Facility. In calendar year 2008, PT completed all assigned gatepost milestone either ahead or on schedule.

PRETREATMENT FACILITY - 90 Day Outlook		
Milestone/Activity	Target Date	Status
Complete Installation of Structural Steel (56' elevation, Southwest Side)	11/08	9/08 A
Issue IFC Drawings for PSA Rack	11/08	11/08A
Complete Wall Concrete Placements to 56' Elevation	12/08	11/08 A

Pretreatment - Fiscal Year to Date Performance (\$ In Thousands)

October 2008 - September 2009



High-Level Waste (HLW) Facility

The HLW Facility will receive the high-level waste fraction from the Pretreatment Facility.

The waste will be mixed with glass formers, converted to glass, and placed in stainless steel canisters that will initially be stored in the Hanford On-Site Canister Storage Building. Final disposition will be the national geologic repository. HLW design and construction completions are 86% and 21%, respectively. Overall, facility completion is 43%.

The critical path originates with release of black cell and hard-to-reach spools for the 903 vessel, passes through the concrete placements of slabs and walls, through the construction of melter cell 1 and installation of the melter to construction complete. The HLW Workable Backlog Program (WBP) plan has been implemented and is expected to accelerate future construction activities and bring cost and schedule in line with the baseline schedule.

The current schedule baseline "lag/gap" is estimated to be closed by February 2010

Construction activities were slowed in December due to severe weather restrictions although crews continued to install ducting system components, fire water piping, pipe hangers in the drum transfer tunnel and electrical tray, and drain piping at the -21' elevation. Efforts also continued on installation of wall and slab rebar and commodities at the southeast end of the facility, 0' elevation. Crews at the +14' elevation continue to erect rebar curtains west of the facility and install structural steel supports, rebar, decking, and commodities for slabs around the perimeter of the filter cave and for future slab placements.

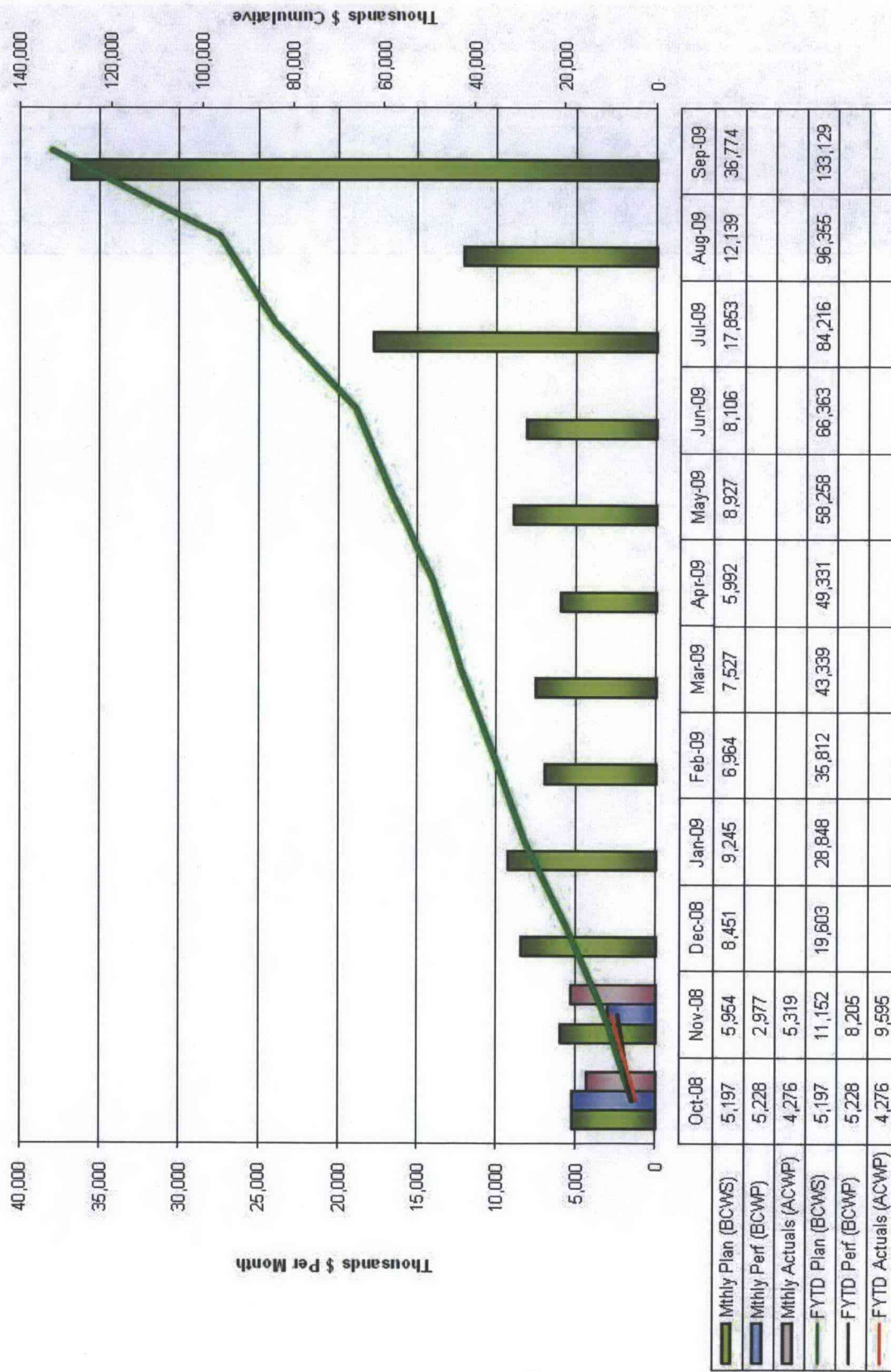
Engineering activities this month included the issuance of system supplemental instrument diagram documents for the HLW melter process and completion of environmental qualification data sheets for the important-to-safety high temperature butterfly valves. Other activities included revised drawings for the HLW in-cave vacuum system, plans and schedules for the +21 elevation; rebar calculations for the +37 to +58 elevations, steel framing drawings for +58 elevation. Reviews were conducted on numerous drawing change notices, system logic diagrams, layout drawings, calculations and over 46 vendor drawings. Vendor issued drawings were also reviewed for the Autosampling System (ASX) wiring schedule and the filter cave handling system melter shield door. Review of the factory acceptance test procedure for the five-ton wall-mounted jib cranes was also completed this month and 12 electrical joggles were released for shipment.

The following table provides a status of near-term gatepost milestones for the HLW Facility:

HIGH LEVEL WASTE FACILITY- 90 Day Outlook		
Milestone/Activity	Target Date	Status
Issued for Construction-Piping Isometrics for Breathing Service Air	11/08	10/08 A
Place Elevated Slab 2001 (+14') Annex	12/08	7/08 A
Autosampling System Design Complete	12/08	6/10
Install Transfer Bogie Maintenance Crane Steel/Rails	1/09	2/09
Install Pipe (Elevation 21)	1/10	12/08

High Level Waste - Fiscal Year to Date Performance (\$ In Thousands)

October 2008 - September 2009



Low-Activity Waste (LAW) Facility

The LAW Facility will vitrify low-activity waste from the Pretreatment Facility. Waste will be mixed with glass formers, vitrified into glass at an average daily rate of 30 metric tons, and placed in stainless-steel containers that will be disposed on site in the Integrated Disposal Facility. Overall facility percent complete is 71%, design is 95%, and construction is 64%.

The LAW critical path remains tied to Off-gas equipment. The Secondary Off-gas/Vessel Vent exhausters were delayed due to receiving a new proposal from the vendor based on design changes and environmental equipment qualifications. The LAW critical path is currently forecasted behind schedule however, BNI is submitting a revision to its Over-Target Baseline that will push construction completion to 2015--in line with the other WTP facilities. Although BNI's proposed over-target baseline plan will provide schedule relief, cost saving and corrective action initiatives must also be finalized including the piping super process improvement project, subcontract management improvements and the potential for cost savings in areas of quality designations.

The WTP project reached a major construction milestone in late November when the first LAW melter assembly was completed. The WTP will include four melters in two of its four major nuclear facilities: the LAW Vitrification Facility and the High-Level Waste Vitrification Facility. Each melter assembly contains the melter base and walls. Once delivered to the WTP construction site the base and walls will be assembled and a brick interior will be constructed. The melters will be topped off with a lid and other components before being installed.

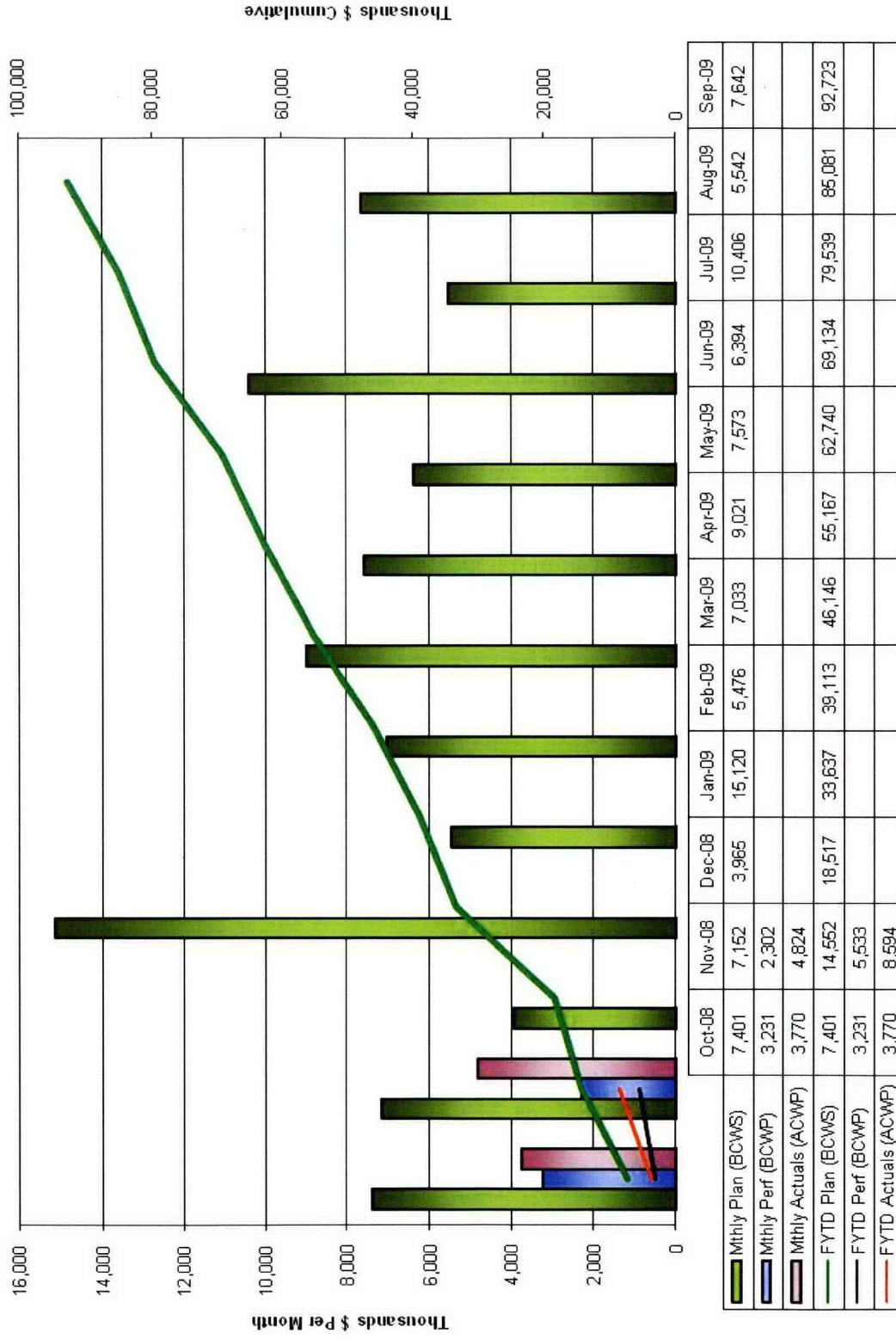
Construction forces continue to winterize the building by installing air locks at entries. Crews are applying cementitious fireproof coatings on the annex second floor exterior structural steel columns and installing windows in the annex and reinforcement steel for the receiving dock basemats located outside the northeast corner of the facility. Crews also are erecting the structural steel for the breathing service air building outside the southeast side of the facility. Crews continue to install ductwork; partition walls; piping; electrical conduit; fireproofing; and grating, handrail, and stairs for platforms on all levels of the facility. Crews also continue to erect the switchgear building outside the northeast corner of the facility and to install sheetrock walls around the southwest stairs to provide a fire-rated egress. Crews installed a second bulge for process cell #1, completed the epoxy floor coating on the south half of the process cell floor and placed 530 cubic yards of concrete for the loading dock basemat located outside the northeast corner of the facility.

The following table depicts near-term gatepost milestones for the LAW Facility:

LOW ACTIVITY WASTE FACILITY- 90 Day Outlook		
Milestone/Activity	Target Date	Status
Deliver Melter Power Supply Equipment PA #5A	9/08	2/09
Deliver Melter Off-Gas Spools 1B&1C	10/08	2/09
Complete Remaining Iso Design	12/08	5/09
Deliver Melter #1 Base	12/08	11/08A
Install Roof and Wall Liner Plate, PA#3C&D	1/09	7/09

Low Activity Waste - Fiscal Year to Date Performance (\$ In Thousands)

October 2008 - September 2009



Analytical Laboratory (LAB)

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. Overall facility complete for LAB is 43%, design is 91%, and construction is 54%.

DOE is currently assessing the schedule effects of the recently submitted revision to the over-target baseline. The plan could have a significant impact to the LAB schedule. The project is continuing to focus on outstanding engineering deliverables to support material and equipment deliveries.

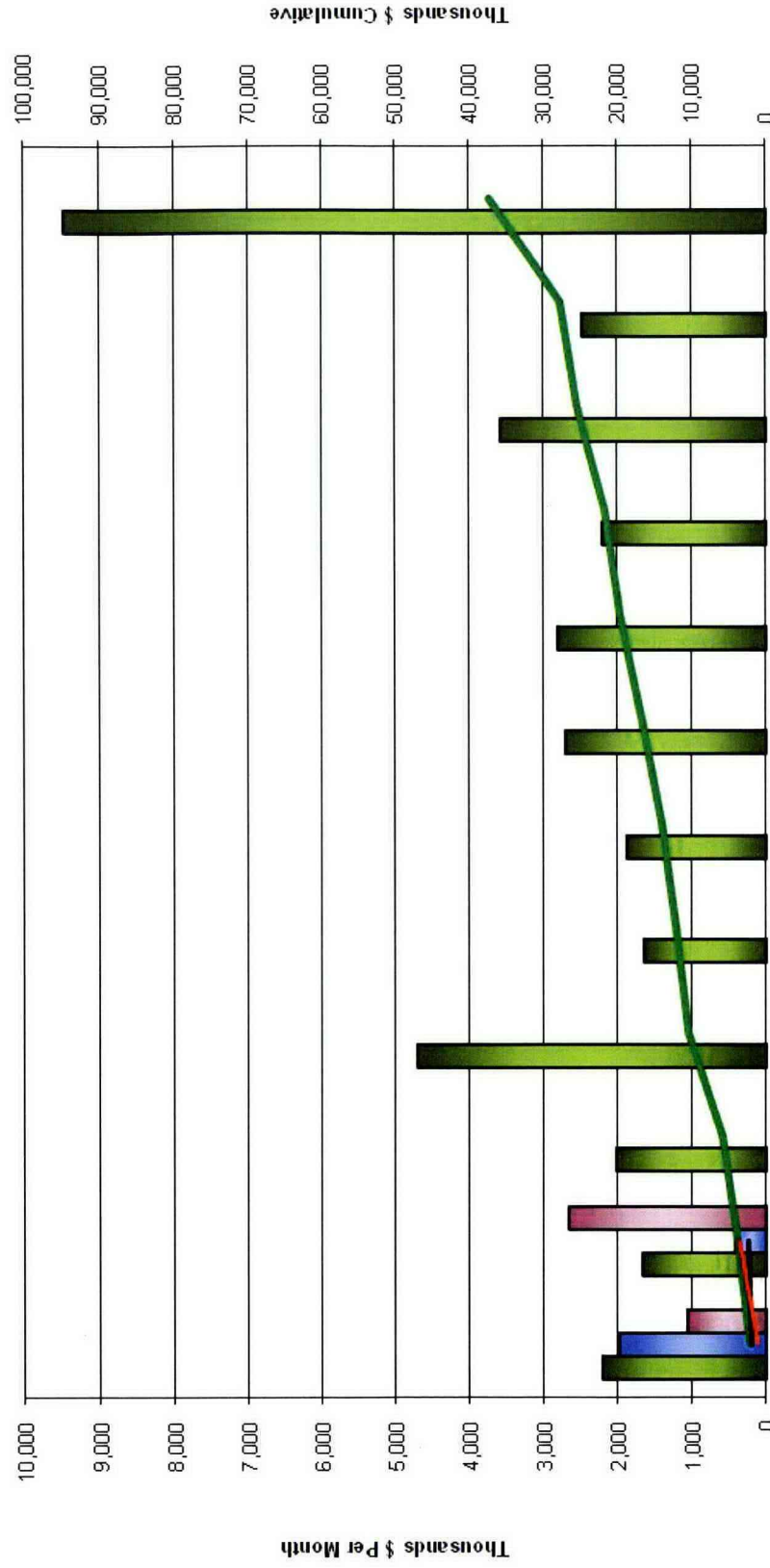
Electricians are installing cable tray supports east of the hot cell and lightning protection on the roof. Ductwork and firewater piping are being installed. Ironworkers continue work in the hot cell for partition installations. Pipefitters continue to fabricate and install steam piping, including supports. Subcontractor crews are making progress erecting and installing metal stud partition walls and applying hanger coatings.

The following table depicts near-term gatepost milestones for the LAB:

ANALYTICAL LABORATORY- 90 Day Outlook		
Milestone/Activity	Target Date	Status
Deliver Master Slave Manipulators	4/08	2/09
Complete 65% HVAC QL Ducts & Support Installation	9/08	9/08 A
Complete C5 Tank Pit Elevated Concrete	11/08	5/09
Complete 55% HVAC CM Duct and Support Installation	12/08	6/09

Analytical Laboratory - Fiscal Year to Date Performance (\$ In Thousands)

October 2008 - September 2009



	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09
Mthly Plan (BCWS)	2,209	1,668	2,014	4,714	1,636	1,868	2,714	2,822	2,204	3,577	2,482	9,473
Mthly Perf (BCWP)	1,982	412										
Mthly Actuals (ACWP)	1,059	2,668										
FYTD Plan (BCWS)	2,209	3,878	5,891	10,606	12,242	14,110	16,824	19,645	21,849	25,426	27,908	37,381
FYTD Perf (BCWP)	1,982	2,394										
FYTD Actuals (ACWP)	1,059	3,728										

Balance of Facilities (BOF)

BOF provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. Overall facility percent complete for BOF is 51%, design/engineering is 75%, and construction is 65%.

Construction forces completed the installation of 9,648 linear feet of pipe in the Chiller Compressor Plant in November. This marked the completion of the gatepost milestone to achieve completion of 90% pipe installation in this facility. Electricians have now begun terminations for the cables feeding power to the compressors and installation conduit on the air dryers while pipefitters continue working on Plant Service Air System piping.

Startup testing of the Cathodic Protection System has begun with megger (resistance) testing of rectifier #1, north of the PT Facility, which helps provide corrosion protection of underground Plant Service Air System (PSA) piping. Following this resistance test, the Rectifier was filled with oil, which provides a medium for cooling.

In the Water Treatment Building, pipefitters are installing supports and piping. Efforts to backfill the DOE lines south of the PT Facility are also continuing along with backfilling of various commodities to bring low areas up to rough (i.e., estimated) grade. Excavations using the Vac-Trucks include temporary power for substation 12, grounding north of the LAW Facility near the west and east corners, and grounding near the south edge of the PT Facility slab.

A temporary water drain line was installed at the south edge of the PT Facility with backfill and three inches of gravel to follow in preparation for placement of a construction crane. Crews also continue to prepare for the installation of three temporary concrete pads between the PT and HLW Facilities; these will be used to facilitate assembly of piping modules for the PT Facility.

Pipefitters continue preparation work for installing an equipment skid in between the two 1,000-gallon air stripper columns used to remove trihalomethanes from the Nonradioactive Liquid Disposal (NLD) liquid as it is transferred to the Treated Effluent Disposal Facility from the NLD tank. The equipment skid will include blowers drawing air from atmosphere and discharging it as liquid passing through the stripper columns.

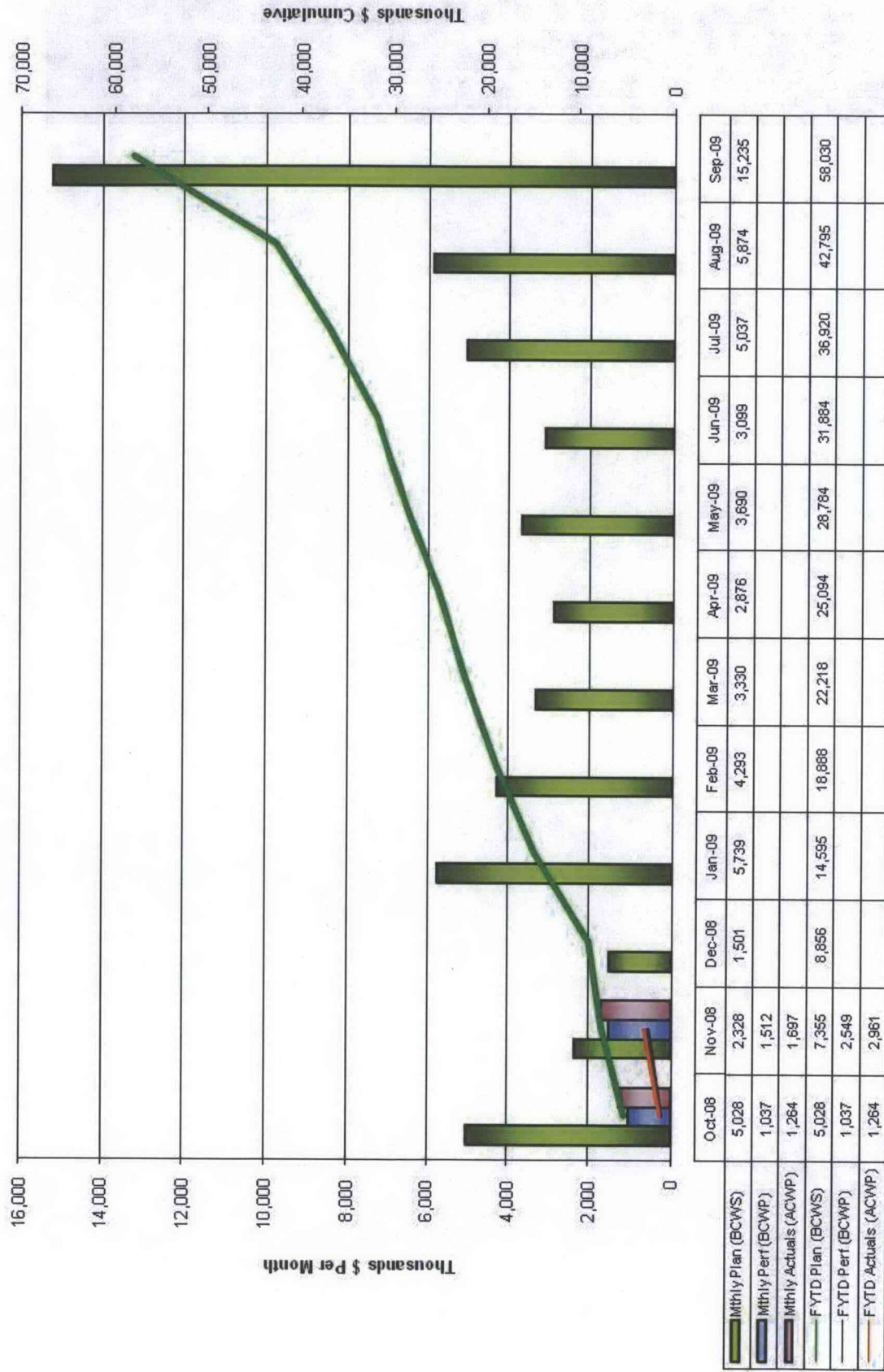
The following table depicts near-term gatepost milestones for the BOF:

BALANCE OF FACILITIES - 90 Day Outlook

Milestone/Activity	Target Date	Status
Award 4.16KV Emergency Diesel Generator PO	10/07	1/09
Complete 90% Chiller Compressor Pipe Installation	12/08	11/08A

Balance of Facilities - Fiscal Year to Date Performance (\$ In Thousands)

October 2008 - September 2009



Manager Milestone Review

82

January 2009

KEY COMMODITY QUANTITY PROGRESS				
Commodity	Unit of Measure	Current Planned at Completion Quantity	Installed through November 2008	Percent Complete
Concrete	1000 cy	258.89	180.37	69.7%
Structural Steel	1 ton	35,251	12,614	35.8%
Piping (in buildings)	1000 lf	885.23	141.51	16.0%
Piping (underground)	1000 lf	113.44	95.38	84.1%
Conduit (in buildings)	1000 lf	782.01	95.25	12.2%
Conduit (underground)	1000 lf	188.16	177.83	94.5%
Cable Tray	1000 lf	96.58	17.90	18.5%
Cable and Wire	1000 lf	4,732.55	223.24	4.7%

Waste Treatment Plant Project - Percent Complete Status

Through November 2008

(Dollars - Millions)	Overall Facility Percent Complete			Design/Engineering			Construction		
	Budget at Completion (BAC)	Budgeted Cost of Work Performed (BCWP)	% Complete	Budget at Completion (BAC)	Budgeted Cost of Work Performed (BCWP)	% Complete	Budget at Completion (BAC)	Budgeted Cost of Work Performed (BCWP)	% Complete
Facilities									
Low-Activity Waste	1,431.7	1,014.0	71%	124.0	117.8	95%	226.7	144.8	64%
Analytical Lab	559.3	241.4	43%	35.5	32.2	91%	62.5	34.0	54%
Balance of Facilities	920.5	471.7	51%	61.0	45.7	75%	173.6	112.0	65%
High-Level Waste	2,482.8	1,069.7	43%	197.0	169.9	86%	438.1	94.0	21%
Pretreatment	4,102.4	1,631.3	40%	328.4	223.6	68%	725.3	187.4	26%
Plant Wide/Gen Services	incl. above	incl. above	incl. above	622.4	450.8	72%	1,654.3	745.2	45%
Undistributed Budget	7.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total WTP	9,504.5	4,428.1	47%	1,368.3	1,040.0	76%	3,280.5	1,317.4	40%

Source: WTP Contract Performance Report

January 27, 2009

[illegible]